

# RAILWAY AGE

THE STANDARD RAILROAD WEEKLY FOR ALMOST A CENTURY.

MARCH 26, 1951

42411  
MORE THAN  
**131,000**  
CARS EQUIPPED

W B A S H

W A B A

WAB

37133

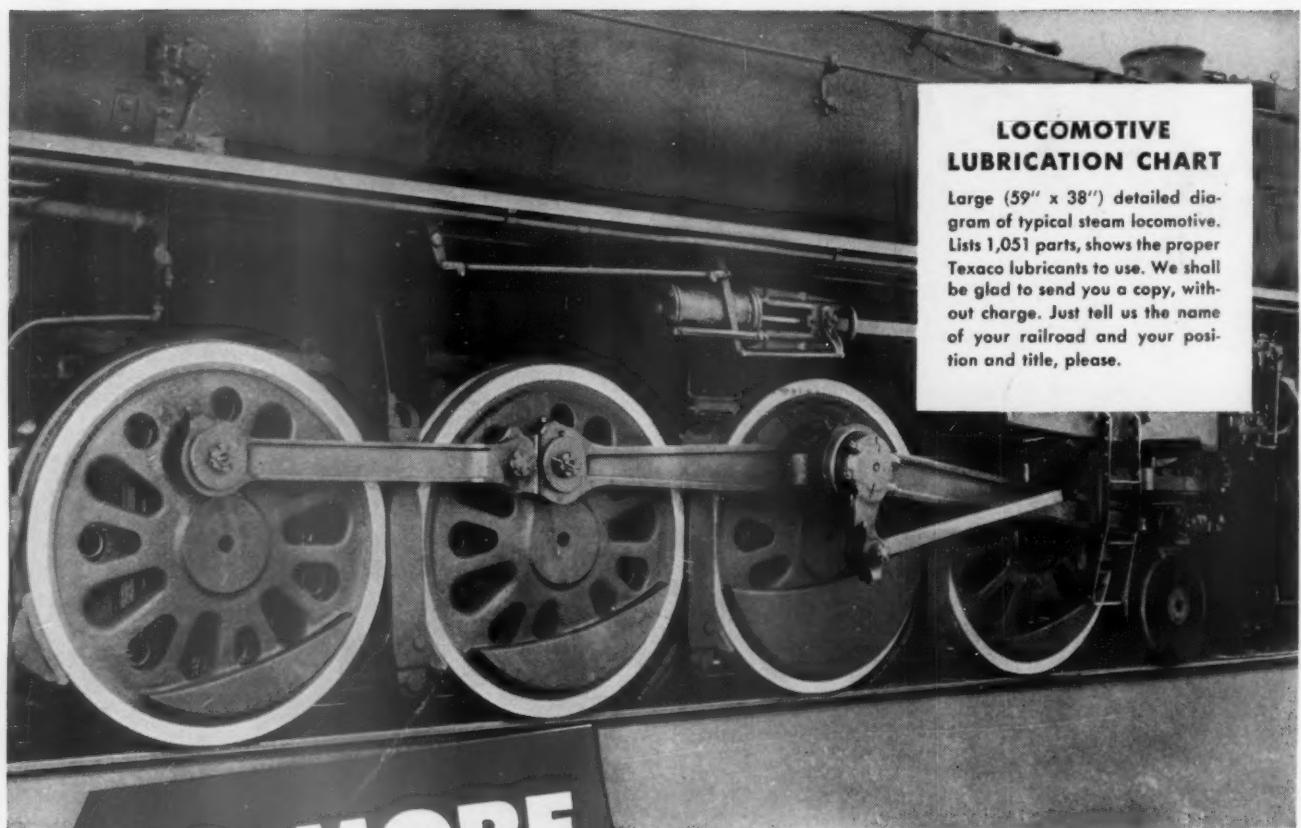
CAP. 10000  
LOAD 13030  
WT. 38700



**Cast Steel  
HOPPER  
FRAMES**

...ANY ONE OF WHICH WILL CARRY  
GRAIN WITHOUT LOSS OF LADING!

THE WINE RAILWAY APPLIANCE CO. TOLEDO 9, OHIO



**LOCOMOTIVE  
LUBRICATION CHART**

Large (59" x 38") detailed diagram of typical steam locomotive. Lists 1,051 parts, shows the proper Texaco lubricants to use. We shall be glad to send you a copy, without charge. Just tell us the name of your railroad and your position and title, please.

**NO MORE  
"HOT PINS"**

**How a great railroad\*  
cured a "headache" with  
the help of Texaco products  
and engineering service**

\*Name on request

None of numerous driving journal greases tried could lick this railroad's "hot pin" troubles. Then *Texaco Driving Journal Compound* was used. Results were far better, but the Texaco engineer wasn't satisfied. Being a former railway master mechanic, he was able to suggest a slight change in the main rod back-end bushing. This was made and, with *Texaco Driving Journal Compound* in the rod cups, "hot pin" troubles vanished completely.

The story points up the fact that Texaco engineering service, rendered by experienced railroad men, is geared to go far beyond mere lubrication recommendations. In like manner, Texaco lubricants give you a bonus in quality.

*Texaco Driving Journal Compounds and Rod Cup*

*Greases*, for example, are made from heavy-bodied cylinder stocks and far out-perform ordinary greases in their ability to withstand high temperatures and severe pressure conditions. They will not squeeze out! They have an inherent oiliness which sticks to the frictional surfaces. Count on them for longer lasting, more positive protection.

Let a Texaco representative explain in detail the cost-saving advantages of Texaco Railroad Lubricants and Texaco's unique Systematic Engineering Service. Just call the nearest Railway Sales office listed below, or write:

☆ ☆ ☆

The Texas Company, *Railway Sales Division*, 135 East 42nd Street, New York 17, N. Y.

NEW YORK ★ CHICAGO ★ SAN FRANCISCO ★ ST. PAUL ★ ST. LOUIS ★ ATLANTA



**TEXACO Driving Journal Compound**

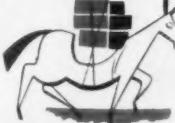
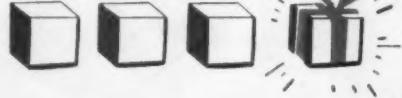
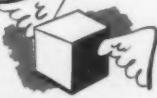
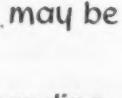
**TUNE IN . . . TEXACO STAR THEATER** starring MILTON BERLE on television every Tuesday night. See newspaper for time and station.

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## How to make more with less steel...

Whether you make dragline buckets  feed troughs 

truck trailers  with Inland **HI-STEEL**, you can retain the same structural strength  yet save enough steel on every three units to fabricate a fourth one!   Where payload is important  extreme strength and elimination  of deadweight essential **HI-STEEL** is the answer. When you must make your product stronger  or make it lighter  or make it last longer  without increasing your steel tonnage **HI-STEEL** is the answer. **HI-STEEL**'s yield point  is nearly twice as high as ordinary structural-grade carbon steel, plus superior notch toughness and fatigue strength. **HI-STEEL**'s resistance to atmospheric corrosion  is four or five times as much as ordinary carbon steel. Abrasion  resistance  may be improved as much as 12 times  over ordinary carbon steel, depending on the abrasive medium. No change in shop  practice is ordinarily required when fabricating **HI-STEEL**.

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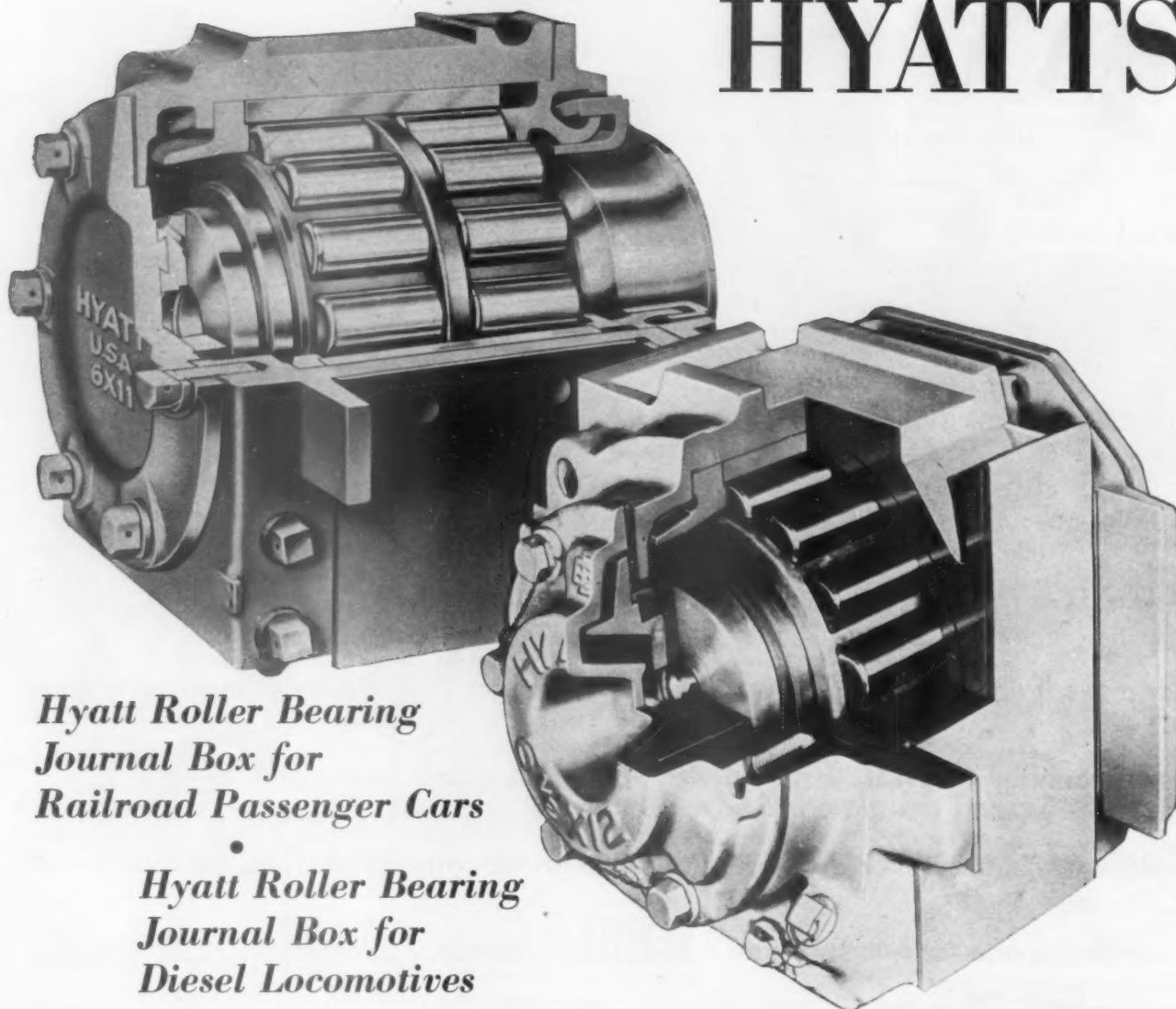
**INLAND** **HI-STEEL**

INLAND STEEL COMPANY: 38 So. Dearborn St. Chicago 3, Ill.

SALES OFFICES: Chicago, Davenport, Detroit, Indianapolis, Kansas City, Milwaukee, New York, St. Louis, St. Paul

# It's easier with

# HYATTS



**Hyatt Roller Bearing  
Journal Box for  
Railroad Passenger Cars**

**Hyatt Roller Bearing  
Journal Box for  
Diesel Locomotives**

Rugged construction, simple, easy-to-assemble parts, combined with high capacity straight radial bearings, make Hyatt Journal Boxes definitely easier to maintain.

They are constructed so that the housing and roller assembly can be removed from the car journal as a unit. This is done easily and quickly without special tools, leaving only the Hyatt inner race and water guard on the car journal. All Hyatt roller assembly and housing combinations of the same size and type are freely interchangeable on axles having Hyatt inner races and water guards mounted.

Spare journal box inventories can be reduced

since protective wheel sets need only be equipped with inner races and water guards instead of complete journal boxes.

The boxes and bearings are easier to clean and inspect because all parts are readily accessible. Wheel lathe work is simplified since wheels can be turned on collets instead of centers thus permitting deeper, faster cuts. Hyatts make maintenance work easier all around. When you consider journal boxes for new or changeover equipment, remember—"It's Easier With Hyatts." Hyatt Bearings Division, General Motors Corporation, Harrison, New Jersey.

## HYATT ROLLER BEARING JOURNAL BOXES

# RAILWAY AGE

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## IN THIS ISSUE

### EDITORIAL COMMENT:

Keystone of the Arch — The Superintendent and His Assistants.....	29
Can the Weight Trend Be Reversed? .....	30
Mack Trucks Again Wave a Thorny Olive Branch .....	31

### GENERAL ARTICLES:

Train Performance Calculator .....	32
Business on "Internationals" Better Than Expected .....	34
Refrigerator Cars — A Progress Report, by John N. Kelley .....	37
Around and About the A.R.E.A. Meeting .....	40
The Royal Commission Reports .....	42
Electric Snow Plows .....	45
Deferred Maintenance Reaches \$950 Million .....	46
New and Improved Products of the Manufacturers .....	47

### DEPARTMENTS:

General News .....	49
Railway Officers .....	72
Operating Revenues and Expenses .....	78

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Railway Age Railway Mechanical & Electrical Engineer Railway Engineering & Maintenance  
 Railway Signaling & Communications Car Builders' Cyclopedia Locomotive Cyclopedia  
 Railway Engineering & Maintenance Cyclopedia American Builder  
 Marine Engineering & Shipping Review Marine Catalog & Buyers' Directory  
 Books covering transportation and building

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# Select the Best Control Point For Your New Signaling!

Thanks to modern "Union" control systems . . . the control point for a new signal installation can be ten, twenty, fifty, a hundred or more miles from the actual controlled territory.\* Economical . . . too . . . because only a two-wire line . . . upon which other facilities can be superimposed . . . is required to bridge the intervening distance.

Railroads are free to select control points

which will provide the greatest operating and economic advantages from their C.T.C. . . . Interlockings . . . and other installations. That is why so many roads are now *concentrating control at division headquarters* . . . to obtain the highest degree of efficiency by fully utilizing the division-wide knowledge of operations available only to headquarter's personnel. May we give you further details?

\*In twelve installations, on 9 railroads, the average distance from the control point to the territory is 61 miles.

**UNION SWITCH & SIGNAL COMPANY**

SWISSVALE

NEW YORK CHICAGO



PENNSYLVANIA

ST. LOUIS SAN FRANCISCO

## WEEK AT A GLANCE

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**VARYING PER DIEM?** The New York, Susquehanna & Western proposes, effective April 1, to set its own per diem rates—varying from \$1.20 a day on old cars to \$2.00 a day on brand new ones. The proposal, as set out in a letter from Susquehanna Trustee Henry K. Norton to A.A.R. President William T. Faricy, is explained in full in the news—along with the N.Y.S.&W.'s reasons for making it and the legal opinion on which it is based.

**IN THE SPOTLIGHT:** February gross 20.8 per cent above 1950.—Southern Pacific to build new \$4.5-million yard at Roseville, Cal.—Electro-Motive Division announces agreement with Australian firm to build diesels there.—Week's freight car orders total 4,200 units, including 1,000 each for C.&E.I. and G.N.; also 1,100 cars for the Canadian National.—1,652 locomotives on order March 1.—C.&O. authorized to sell stock to its top executives.—T.&P. buys 52 diesels.—D.&R.G.W. asks authority to reduce debt and cut fixed charges by selling \$40,000,000 of new first mortgage bonds.—New York syndicate acquires Karpen.—A.A.R. Medical & Surgical section to meet April 2.—New York legislature passes bill to permit reorganization of Long Island under private ownership; also bills further to increase state revenue from heavy trucks.—Edwards calls passenger loss "economic waste."—Wilson establishes transport advisory group.—Post Office Department tells Congress it proposes to take for itself full advantage of railroad "economies" by "settling" mail pay case on basis of 38 per cent increase.—P.R.R. orders 64 passenger cars.

**GOOD NEWS ON STEEL:** Freight car steel allocations will probably be restored, for June, to an amount sufficient for 10,000 cars, judging from recent information from N.P.A. There may even be enough for a few extras, according to our news story on the subject. The restoration of the allocation from the 9,000 car level established for May came as the Ohio Valley Transportation Board strongly protested the May cut; and as H. H. Pratt, former president of the Atlantic States board, urged enough steel for 10,000 cars a month in excess of retirements. Both of the protests are also reported in the news.

**ROYAL COMMISSION:** After more than two years of intensive study, the special Royal Commission which has been examining Canada's public transportation problems has submitted its report to Parliament. And the Canadian government has announced its intention of seeking early passage of legislation to implement some of the commission's more important recommendations. (See news section.) Some of those recommendations, incidentally, might be applied in the United States as well as in Canada; e. g., the suggestion that all forms of transportation should be regulated by a single government agency, the statement that one form of transport should not expect to escape regulation which is imposed on its competitors, the idea that railroads should be allowed to meet competition where they find it, etc. The report (which is summarized beginning on page 42) will doubtless, of course, be disappointing

in some respects to some people, but we wish that some, at least, of the ideas expressed in it could be brought down south of the border.

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**ALL-TIME HIGH?** Capital expenditures by Class I railroads in 1951 will reach a new all-time of about \$1,376 million, according to estimates submitted to the I.C.C. and summarized in the latest "Monthly Comment" of the Bureau of Transport Economics and Statistics. The "Comment," which is summarized in the news pages, also includes figures on the proportion of traffic handled by diesel power; on the relation between payments on equipment obligations and depreciation charges, and on cumulative rate increases.

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**BLACK MAGIC:** To a fellow who even has trouble tuning in the right station on a radio, the train performance calculator described on pages 32 and 33 smacks of sheer black magic. Fortunately, magic of the particular type employed in the calculator is no longer punishable by hanging or stake-burning. And so the P.R.R. is quite safe in using this electro-mechanical "brain" to compute the optimum performance of all kinds of motive power.

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**DEFERRED MAINTENANCE**—to the tune of some \$950 million had accumulated on Class I railroads up to last December 31, according to a recent study by the Engineering Section of the I.C.C.'s Bureau of Valuation. But while the dollar figure sounds big, it reflects, the bureau says, only about 8 per cent of deferral—which "while not satisfactory . . . cannot yet be considered serious." All the deferred maintenance, incidentally, was in fixed-property items. The bureau's study is briefly reviewed on page 46.

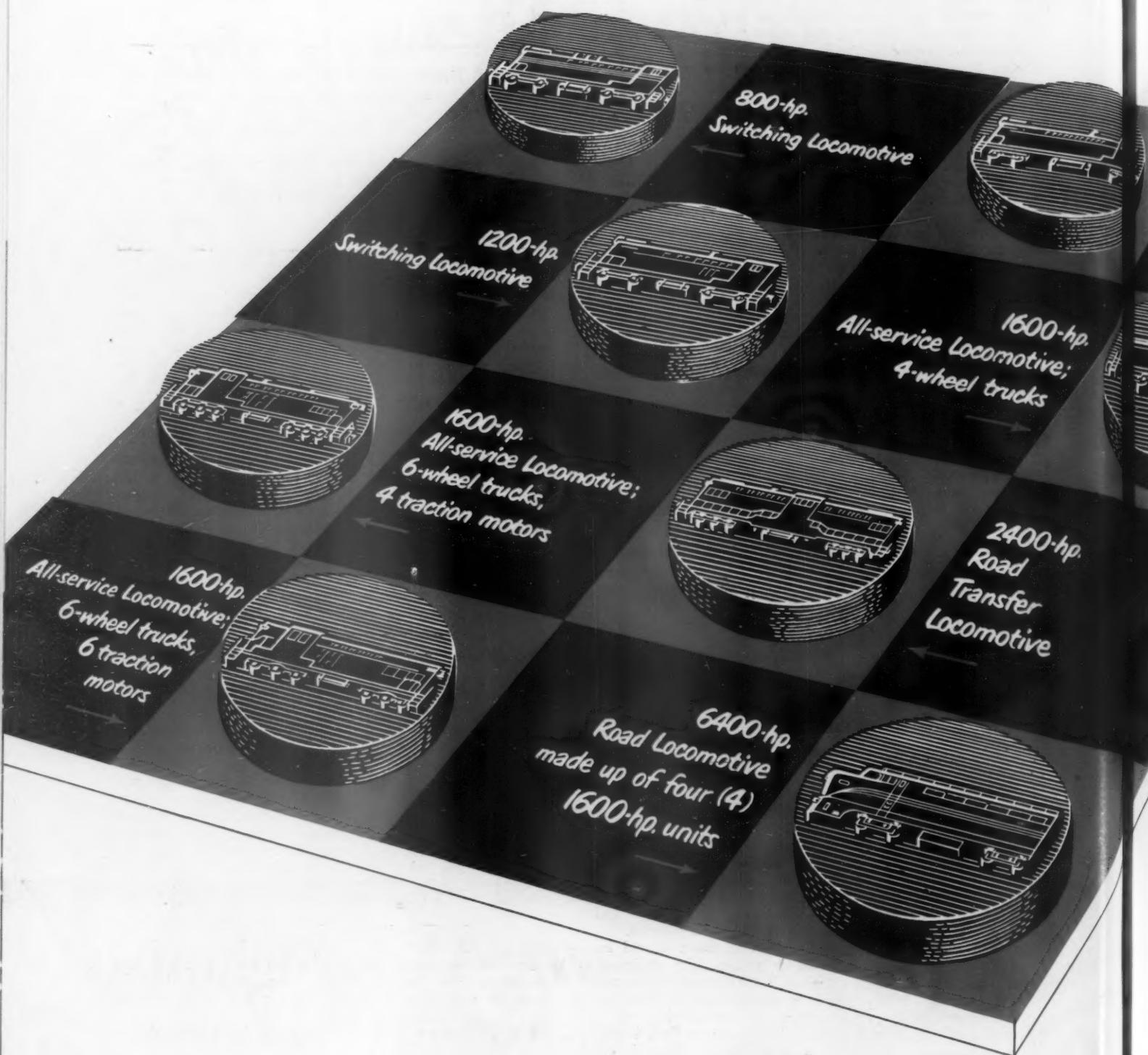
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**IT CAN BE DONE:** With its San Francisco-Los Angeles and San Francisco-Portland services, the Southern Pacific has proved that—*where conditions are right*—passenger service can be made to pay. Now the performance of the Great Northern's new Seattle-Vancouver "Internationals" backs up the S.P.'s experience. It takes, of course, a lot of doing—good equipment; fast, convenient schedules; attractive fares; publicity, and, above all, sources of potential traffic. That last factor is obviously the *sine qua non*, and it certainly is lacking in a lot of places. The experiences related in the article beginning on page 34 might not, therefore, be capable of repetition everywhere, but they certainly show what can be accomplished when proper advantage is taken of favorable existing conditions.

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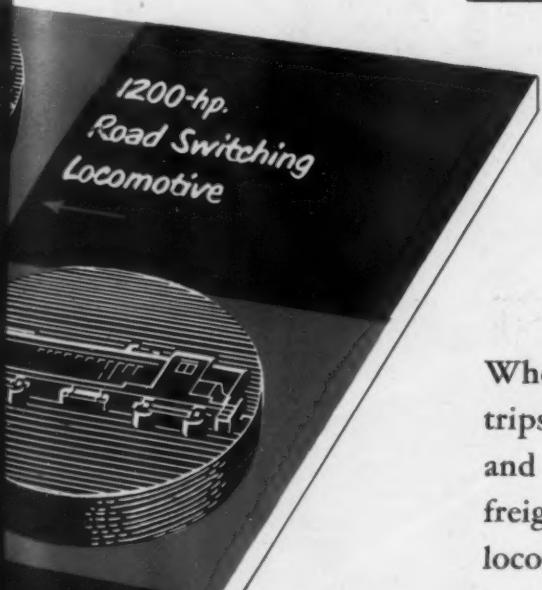
**REFRIGERATOR CAR PROGRESS:** To provide at least 100,000 serviceable refrigerator cars, the railroads should build at least 35,000 new cars and modernize older ones. So says John N. Kelley, in a report on progress in development and construction of new refrigerator cars. Mr. Kelley's report is abstracted in this issue, beginning on page 37.

# No



# matter what the move

there's a **BALDWIN**  
to make it



Whether it's making up trains in classification yards . . . transfer trips on belt lines . . . working the hump . . . combination road and switching duties on short lines . . . or high-speed, main-line freight haulage, the Baldwin-Westinghouse line of Diesel-electric locomotives provides a unit specifically designed for the job.

However—this specialization doesn't limit *diversification*. Almost every Baldwin-Westinghouse unit is consistently handling assignments above and beyond the scope of regular duty. On every road serviced by these locomotives their versatility is adding a valuable plus capacity to the motive power pool.



**BALDWIN-Westinghouse**  
DIESEL-ELECTRIC LOCOMOTIVES

## DRIVE IN THE WEDGE

Essential principles of the Bethlehem 811. To a special tie plate is welded a sturdy bracing part (1). Fitting between this part and the rail is the tapered wedge, into which is swaged a steel spring (2). The spring will withstand tremendous compression force, thereby adding to the tightening effect. Two pawls turn down into slots (3) so that the wedge cannot move.

## LOCK IT (Double Protection!)



**TWO  
EASY STEPS  
THAT MEAN A  
TIGHT RAIL BRACE**

Ask any track man how easy it is to get a tight fit with Bethlehem's 811 Rail Brace. He'll tell you there's nothing to it at all. Just drive the wedge in place and lock it there with twin pawls. The wedge, being always under spring compression, can't loosen from shock. No amount of jarring and jolting can cause it to shift position.

Study the large illustration, which shows clearly why the 811, once installed, is permanently tight. When you want to remove it, however, it won't fight you. Isn't at all stubborn.

There are probably many 811's in track near you. Why not have a look? Or ask a Bethlehem man for full details.



**BETHLEHEM STEEL COMPANY, BETHLEHEM, PA.**

On the Pacific Coast Bethlehem products are sold by  
Bethlehem Pacific Coast Steel Corporation  
Export Distributor: Bethlehem Steel Export Corporation



## SLEDGE HAMMER BLOWS LOOSEN THE CARGO ... BUT NOT THE FINISH!

THOSE SPOTS you see on the side of this hopper car...are actually dents pounded in the metal by sledge hammer blows freeing cargoes.

Some of them were put there nearly three years before the photograph was taken. Yet the finish, based on VINYLITE Brand Resins, is unchipped—still clinging tenaciously to the metal—maintaining its integrity and bond!

It's easy to see why finishes based on VINYLITE Resins are winning railroad friends across the country. Used on hopper, tank, or refriger-

ator cars, as an easily applied three-coat system, these outstanding materials are reducing car maintenance costs to a remarkable degree.

Besides absorbing terrific physical punishment in year-in, year-out service, they resist attack from weather in every climate. They are virtually unaffected by alkalies, most strong acids, oils, greases, industrial fumes, smoke, brine, and most other chemicals.

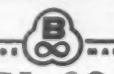
If you have not yet investigated railroad car coatings based on VINYLITE Resins, by all means do

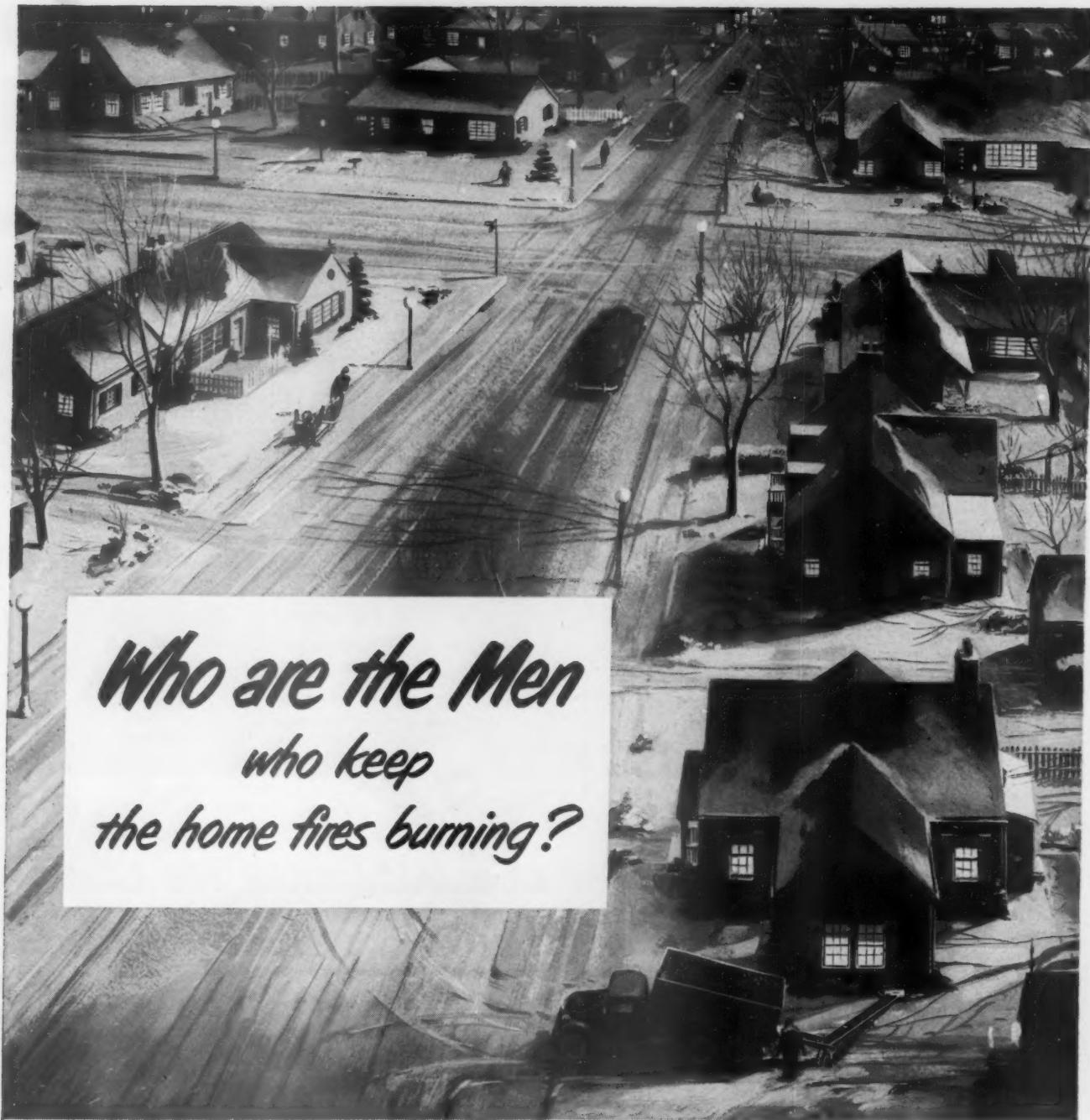
it now. They protect equipment, lower your costs, and give top operating performance. Write Dept. KB-73 for a list of formulators.

Data on "Carclad" Three-Coat System courtesy Sherwin-Williams Company, 101 Prospect Ave., N.W., Cleveland 1, Ohio

**Vinylite**  
BRAND  
**RESINS**  

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**BAKELITE COMPANY**  
a Division of  
Union Carbide and Carbon Corporation  
30 East 42nd Street, New York 17, N.Y.



**They are America's** local coal merchants—in city and village across the nation. Nearly 18 million homes . . . more than half of all the homes in the country . . . are heated by the coal they supply!

They bring healthful heat to homes and offices, schools and hospitals, stores and workshops. They buy, store and deliver over 90 million tons of bituminous coal a year . . . close to one-fifth of all the bituminous coal mined in America.

Today, as always, coal is America's *basic fuel*!

And coal is just as essential—to essential industry! Steel—electric power—railroad transportation—rubber—chemicals . . . all depend on coal!

The producers of coal have always recognized their responsibility to help power the progress of America. And today, the coal industry is ready and able to do its part in fueling the nation's all-out defense program.

For private management has had the vision to invest hun-

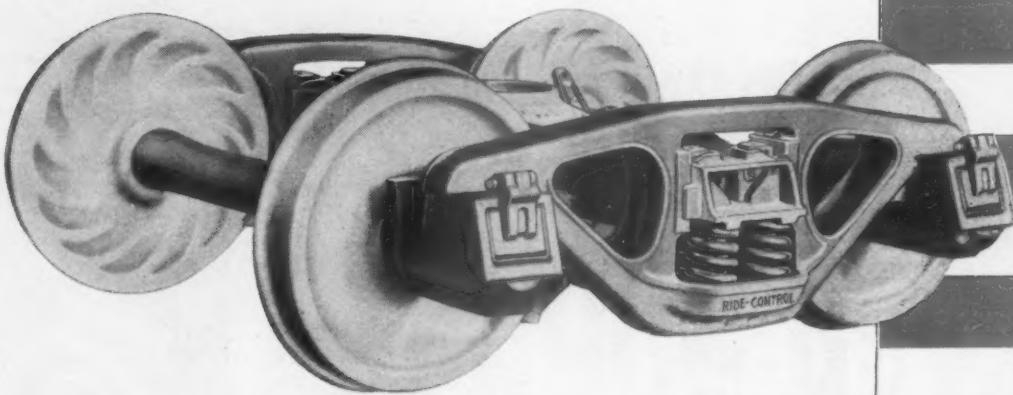
dreds of millions of dollars in up-to-date preparation plants—improved equipment—research and new mine properties. Under free competition, progressive mine operators have developed the most efficient and productive coal industry in the world!

With a continuing supply of necessary equipment, transportation and trained man power, America's independently owned and operated coal mines will produce all the coal that's needed to continue to power the nation's progress, in peace or war.

**BITUMINOUS**  **COAL**

**BITUMINOUS COAL INSTITUTE**  
A DEPARTMENT OF NATIONAL COAL ASSOCIATION  
WASHINGTON, D. C.

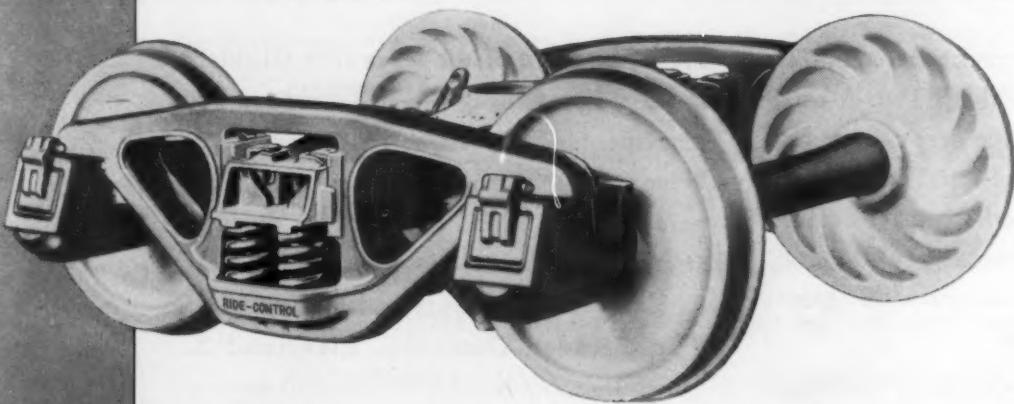
It  
Started  
in  
World War  
II



Eight years ago, smooth-rolling A.S.F. Ride-Control Trucks began changing the freight-movement picture. Initial applications were on special cars for carrying airplane wings from Detroit to the Coast—first in fast freight trains, then as box-express cars operating in regularly scheduled passenger service at speeds up to 100 m.p.h. And Railroaders soon found Ride-Control *right* for every lading purpose.

By 1946, Ride-Control Trucks were being specified for 50% of all new freight cars ordered for domestic use; and in 1950 nearly 100,000 car-sets were purchased. Today, with 133 different users, Ride-Control has been specified for more than 240,000 cars that will help keep *America* strong.

**A·S·F RIDE-CONTROL® TRUCK**



**AMERICAN STEEL FOUNDRIES**

*mint mark of*  *fine products*

Off the paint tracks  
in  
**8 HOURS!**



...thanks to Glidden  
**"TWO-A-DAY"**  
PAINTING



On the paint tracks at 8 . . . off by 4! That's Glidden "Two-A-Day" painting. Weather-beaten cars can get two coats of paint in just 8 hours! Busy equipment needn't be spared from its defense job any longer than necessary . . . goes back on the road *fast*, safeguarded against wear and depreciation.

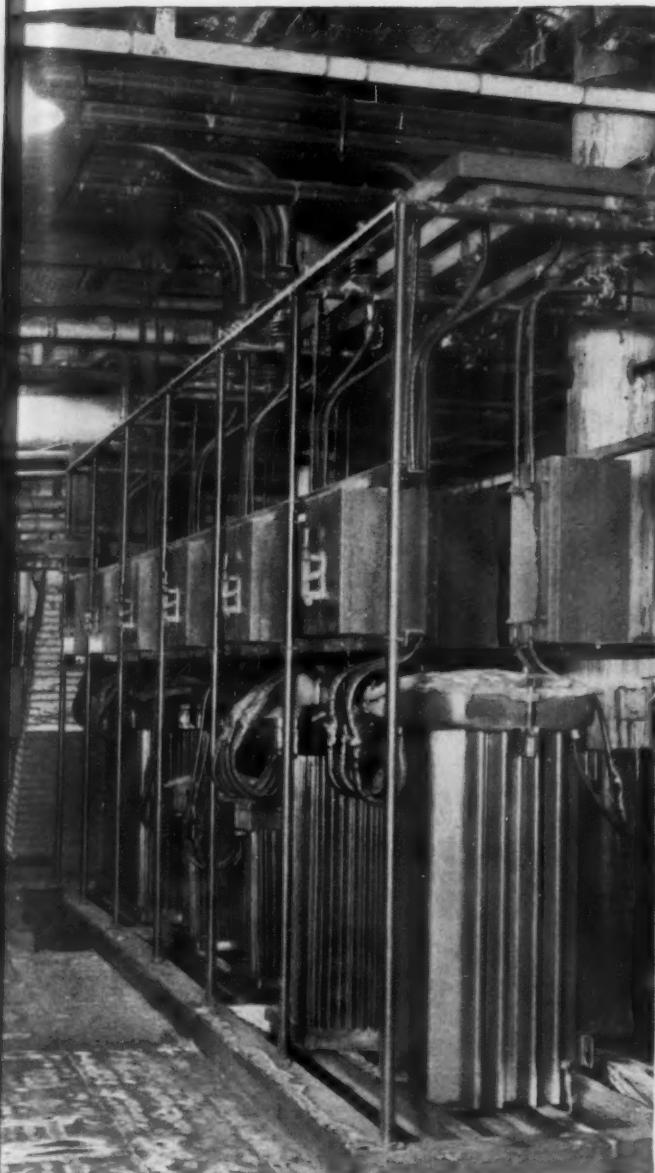
A development of Glidden Railroad Technical Service, "TWO-A-DAY" paint-

ing is but one of the ways that Glidden is helping to meet the maintenance requirements of the railroad industry today. Whatever the problem involving paint or painting procedure, you will get prompt attention from any one of our eight strategically located plants and laboratories. The Glidden Company, Cleveland 2, Ohio. In Canada, The Glidden Company Limited, Toronto.

**Glidden** RAILWAY FINISHES



# THEN and NOW... at the READING TERMINAL



Cumbersome transformers, related apparatus, and pipe framework have been replaced by modern load-center unit substations.

**CONTINUITY OF SERVICE ASSURED** by high interrupting capacity.

**VOLTAGE CONTROL IMPROVED** by holding it to close limits.

**50,000 LB OF CABLE COPPER ELIMINATED.**

**VALUABLE FLOOR SPACE RELEASED** for rental storage.

**PROTECTION INCREASED** for personnel and equipment.

**INVESTMENT LOWERED** by using standard units of equipment.

*All these benefits resulted from installation of a modern G-E power-distribution system in Philadelphia's Reading Terminal.*

Ask your G-E representative for full information about the advantages of modern, low-cost, efficient General Electric power-distribution systems, or write to General Electric Company, Schenectady 5, N. Y.

*You can put your confidence in—*  
**GENERAL ELECTRIC**



## NEW MECHANIZED FREIGHT BILLING METHOD

*SAVES MONEY, SPEEDS COLLECTIONS, FREES PERSONNEL*

A major railroad, now using Remington Rand punched cards in their Consolidated Freight Agency, reports savings greater than 40% over their former method. Also, this Consolidated Agency has taken over the billing for many additional stations — *with no increase in personnel*.

### Many Records and Reports from One Punched Card

Punched cards containing waybill information produce — *at the rate of 6000 lines per hour* — all of these:

1. Made and Received reports
2. Ledger statements for customer
3. Credit statements
4. Drayage allowances
5. Traffic statistics\*

\* Automatic machine sorting of the cards makes it possible to list and total (still at 6000 lines per hour) facts and figures under each of the following categories: (a) by commodities; (b) by shippers; (c) by receivers; (d) by point of origin; (e) by point of destination; (f) by rates; (g) by routes.

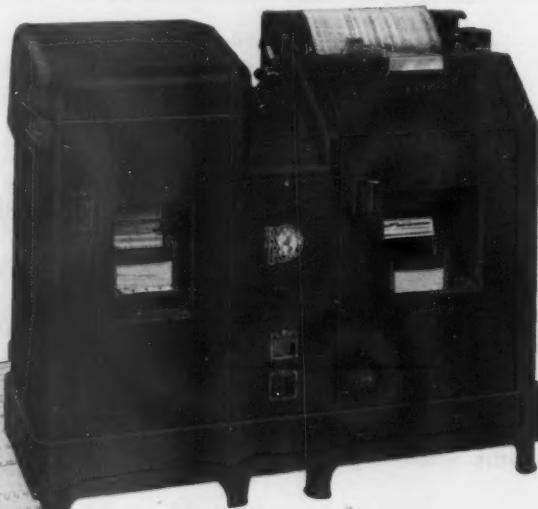
### What This Method Will Give You

The great advantages of Punched Cards for freight billing are top speed and absolute accuracy. With the 5-day credit limit, speed is of course of the utmost value. The method permits reporting

waybills to the Auditor more promptly, facilitates settlement with connecting lines, converts revenues into bank deposits much faster than any other method. And remember: — all these benefits are yours *at lowered cost* straight across the board.

*Let us emphasize that the above procedure is flexible — can be readily adapted to the individual needs of any railroad. Our Transportation Specialists will be happy to work with you to bring to your road the fullest measure of these advantages. Let us send you full information. Address your inquiry to Transportation Methods Department, Management Controls Division, Room 1758, 315 Fourth Ave., New York 10.*

**Remington Rand**



*Alphabetical Tabulator with Instantaneous Summary Punch produces reports and statistics at the rate of 6000 lines per hour*



### Railroads Are Cutting Maintenance Costs Stopping Destruction by Rust

Rust, major cause of depreciation, is stopped, and life of equipment and structures lengthened when you use RUST-OLEUM.

When you use RUST-OLEUM, durable, reliable protection is assured for rolling stock, metal buildings, bridges, towers, tanks, signal equipment — adding years to the usefulness of any rustable railroad property.

#### Cut Your Maintenance Cost

Rescue metal that has already started to rust, Rust-Oleum can be applied over metal already rusted — usually without sandblasting or the use of chemical cleaners. Simply scrape and wirebrush to remove rust-scale, blisters, dirt, etc., then apply Rust-Oleum by brush, dip, or spray. It stops the rust, and promptly dries to a firm, pliable protective coating.

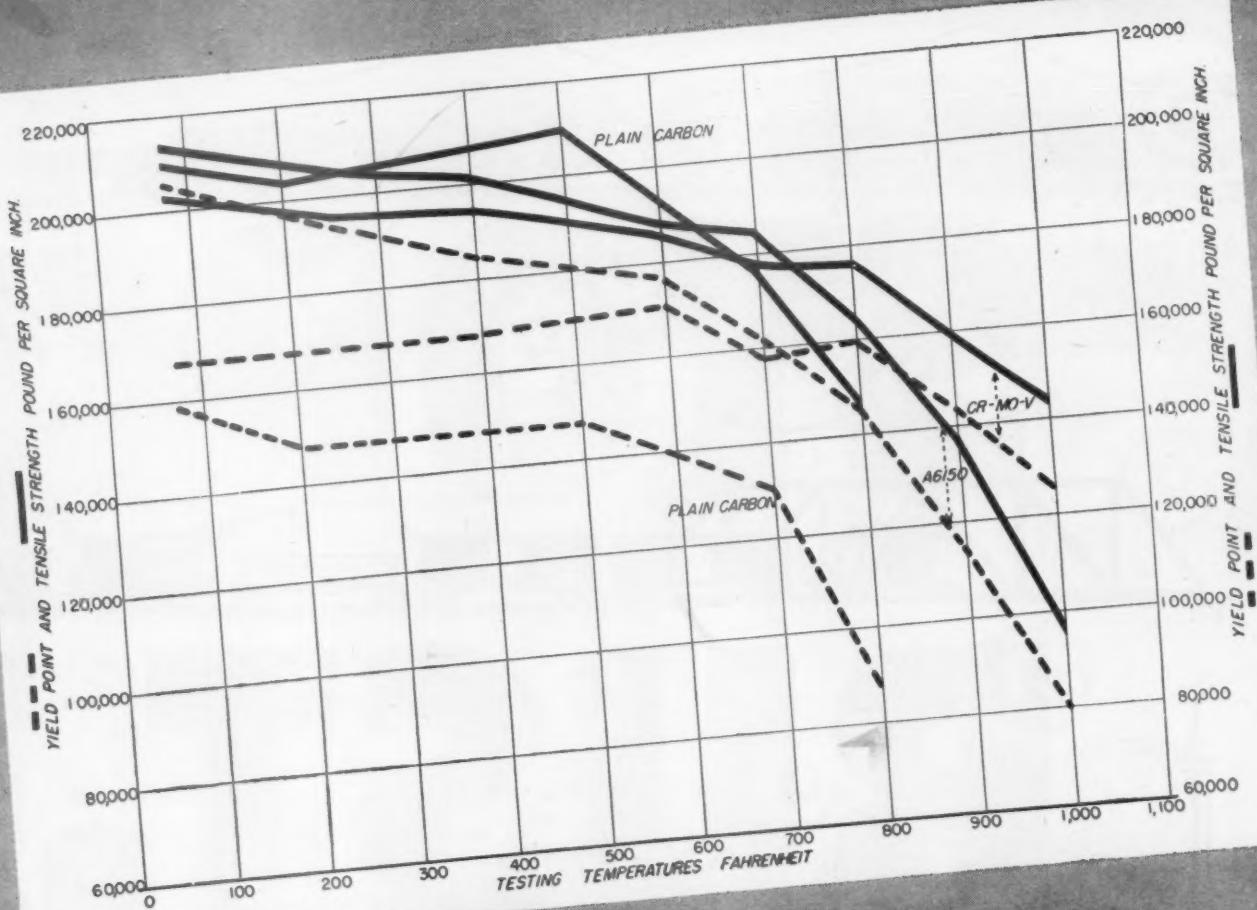
RUST-OLEUM is proving itself everyday in ever greater use by railroads. It is the practical answer to many of your rust problems. Buy or specify RUST-OLEUM on all new construction and rolling stock. Use it in your maintenance, repair and rebuilding work.



New catalog just off the press.  
Write for your copy today!

**RUST-OLEUM CORPORATION**  
2582 Oakton Street, Evanston, Illinois





## HIGH TEMPERATURE PROPERTIES of Cr-V and Cr-Mo-V Spring Steels

SPRINGS FOR SERVICE at elevated temperatures require steels which resist softening and lowering of the yield point. Unless hardness and yield strength are stabilized by correct alloy additions to the steel, these properties deteriorate rapidly as the temperature is raised.

The chart above shows the yield point and tensile strength of three types of spring steel at elevated temperatures determined by standard short-time tension tests.

Springs of plain carbon steel are sometimes used at moderately elevated temperatures, although their lower yield values prevent them from giving service as satisfactory as that of the alloy spring steels.

Chromium-vanadium steel springs, such as AISI 6150, give better service at ordinary temperatures because of the higher yield point. In addition, they may be used at operating temperatures up to about 700° or 750° F

because they retain high yield point values as the temperature is increased.

Chromium-molybdenum-vanadium steel was especially designed for springs operating at temperatures in excess of 750° F. It can be used for springs operating at temperatures as high as 850° F or even higher under some conditions. At 800° F, the yield point of this steel is still greater than that of plain carbon steel at room temperature.

If you have a problem in spring applications at elevated temperatures, our metallurgical engineers will be glad to help you solve it.

MAKERS OF  
ALLOYS



CHEMICALS  
AND METALS

### VANADIUM CORPORATION OF AMERICA

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## gentlemen ... do you have all the evidence? of the jury

Before you reach firm conclusions regarding the values of chilled car wheels, *be sure you know all the facts.*

Call the witnesses . . .

**SAFETY ENGINEER:** "The safety record of the AMCCW wheel, considering all factors, is now unsurpassed in freight car service. The latest AMCCW design continues the trend toward even greater trouble-free mileage."

**EFFICIENCY EXPERT:** "The AMCCW wheel offers lower resistance to rolling and minimum abrasion to the rail. It also offers greater efficiency in brake shoe friction, yet shows less brake shoe wear per unit of retardation."

**METALLURGIST:** "The AMCCW chilled car wheel requires no work-hardening in service. Consequently there is no flow of tread metal. And the damping property of gray iron in the plate and hub of this wheel reduces axle shock."

**MACHINIST:** "You can bore AMCCW chilled car wheels faster, with less wear on cutting tools. And the elasticity of iron permits a tighter fit to the axle."

For more complete information about the advantages of AMCCW chilled car wheels, send for the new booklet: **GENTLEMEN OF THE JURY.**



- Low first cost
- Low exchange rates
- Reduced inventory
- Short haul delivery
- Increased ton mileage
- High safety standards
- Complete AMCCW inspection
- Easier shop handling

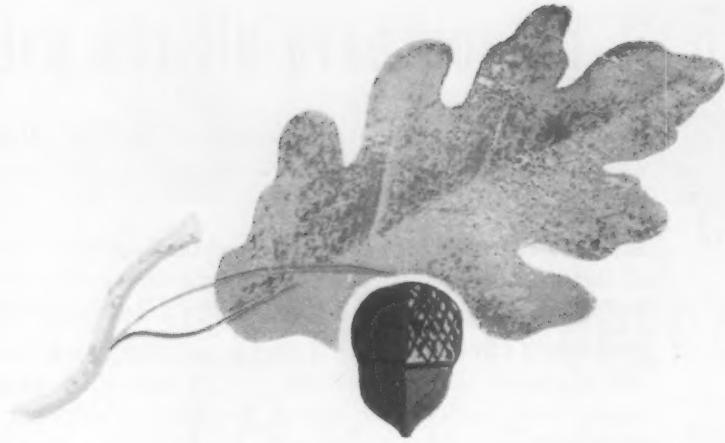
Now, more brackets—thicker, heavier, more continuous flange support; heavier tread on both rim and flange sides.



### ASSOCIATION OF MANUFACTURERS OF CHILLED CAR WHEELS

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American Car & Foundry Co. • Southern Wheel (American Brake Shoe Co.)  
Griffin Wheel Co. • Marshall Car Wheel & Foundry Co. • New York Car Wheel Co.  
Pullman-Standard Car Mfg. Co.



JUNE  
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**first PS-1**

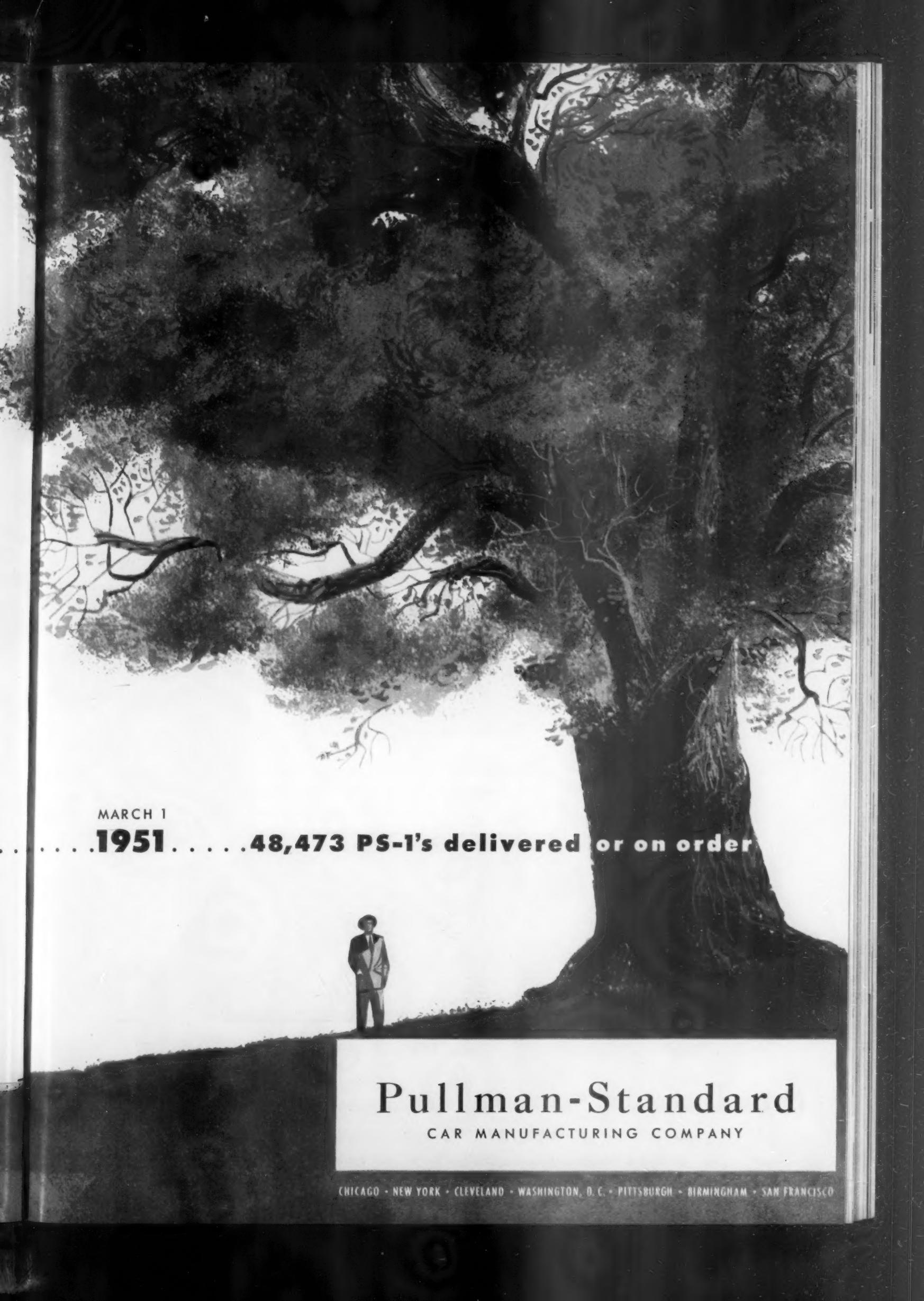
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EFFICIENTLY PRODUCED





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PRODUCTS ARE USED BY  
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Passenger comfort counts on RF&P's Old Dominion. That's why an Edison 88-cell A14H battery protects the 110-volt system which powers fluorescent lights, air conditioning, water coolers, kitchen appliances.



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TRENDS  
in the new passenger cars...**

- ✓ Higher Illumination Standards
- ✓ More Electrical Conveniences
- ✓ Better Air Conditioning
- ✓ More Air Circulation
- ✓ Improved Humidity Control

THEY ALL ADD UP to higher electrical loads and increased battery capacities for adequate operating reserve. That puts lightweight EDISON Nickel-Iron-Alkaline Storage Batteries in a position to save more weight per car than ever before!

The same trends also add up to a greater need for uninterrupted electric power during non-

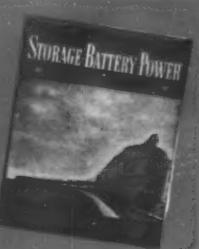
generating time on the road, thus placing greater emphasis on EDISON dependability.

If you have not purchased EDISON Batteries recently, get an up-to-date quotation from us. You'll probably find the price lower than you think, and annual cost (thanks to their well-known long life) the lowest obtainable.

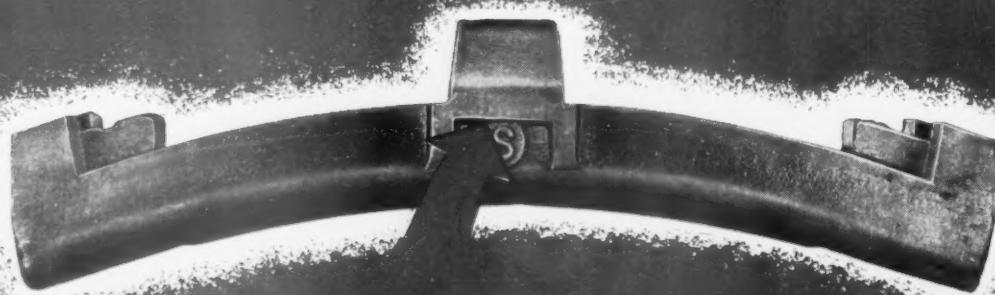


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*Nickel • Iron • Alkaline*  
**STORAGE BATTERIES**

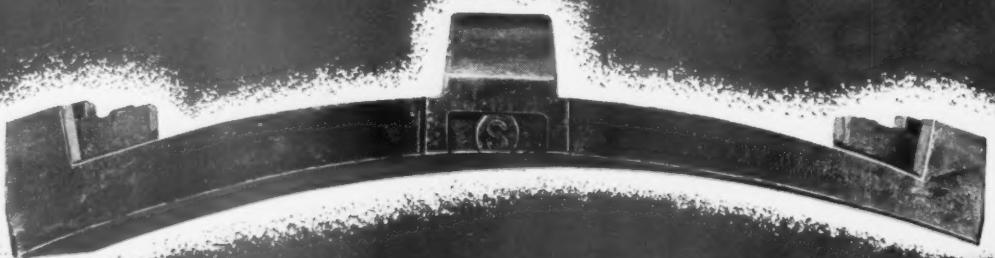
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information on new developments in  
railway cars and their power systems.  
Ask your EDISON district office for  
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**EDISON STORAGE BATTERY DIVISION OF THOMAS A. EDISON, INCORPORATED, WEST ORANGE, NEW JERSEY**



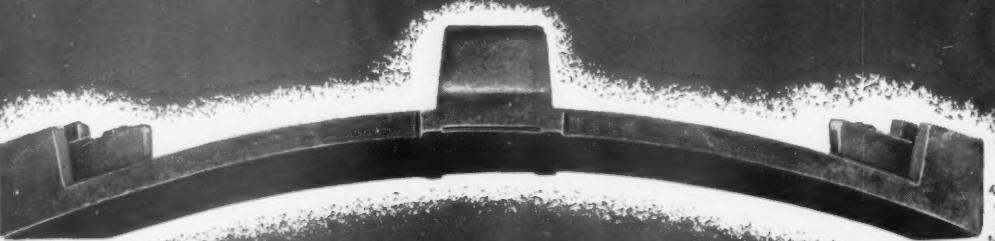
Limit-of-wear is clearly visible. Be sure to wear to this mark.



Do not remove partially worn brake shoes.  
This shoe still has many miles of service that are being thrown away.



Do not remove cracked shoes until they have  
been worn to the limit-of-wear mark. The steel back  
holds the wearable metal in its place for full-wear duty



HERE IS THE WAY A COMPLETELY WORN SHOE SHOULD LOOK.  
It has been worn to the limit-of-wear mark. No material or labor has been wasted.





**TODAY'S NEED... CONSERVE VITAL MATERIALS**

# **GET FULL WEAR FROM YOUR BRAKE SHOES**

America's mounting defense program demands conservation of vital materials. Now, more than ever, it's important that you get full service from your brake shoes. Do not remove them while they are still serviceable. To take them off sooner is a waste of material and time. American Brake Shoe Company, 230 Park Avenue, New York 17, N. Y.

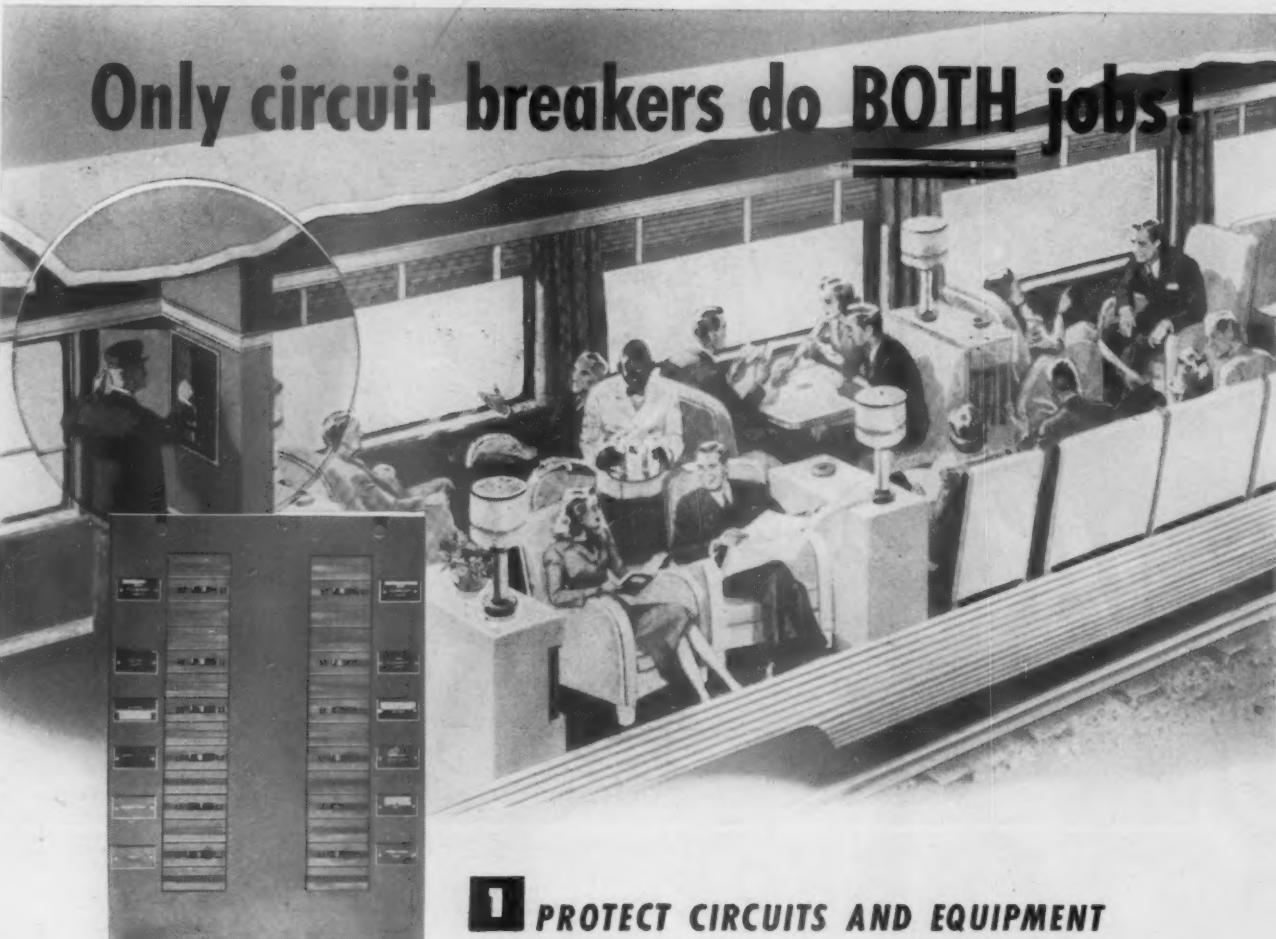
**WEAR ALL BRAKE SHOES TO THE  
LIMIT-OF-WEAR**

**MARK**

**Brake Shoe**

**BRAKE SHOE AND CASTINGS DIVISION**

Save with SAFER... Surer  
AB BREAKERS



A Railway Electric Control Locket  
equipped with Westinghouse  
Circuit Breakers.

## 1 PROTECT CIRCUITS AND EQUIPMENT

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Electrical living on modern trains has sharpened the need for the most modern obtainable circuit control and protection. Complete air conditioning systems, kitchen equipment, journal alarm systems, electropneumatically operated doors, individual roomette lighting, heating and utility outlet systems and other equipment are rapidly expanding railway power requirements.

Westinghouse Circuit Breakers assure you of prompt and complete protection on dangerous overloads and short circuits, restore current with a flip of the handle. There is nothing to replace. For one thousand ruptures—or one, Westinghouse equipment is precisely calibrated for the life of

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For assistance on specification of circuit protection equipment, contact your nearest Westinghouse representative, or write for B-4062, Westinghouse Electric Corporation, Box 868, Pittsburgh 30, Penna; J-30051



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THE COMPLETE LINE



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of your "extra-fare"

freight.... SCULLIN  TRUCKS

the smoothest  
traffic-builder  
between  
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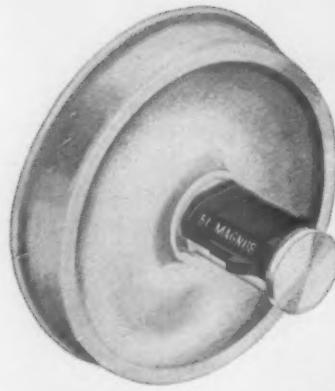
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SAINT LOUIS 10, MISSOURI

*On Mid-America's Main Line, too...*



## IT'S SOLID BEARINGS FOR HIGH SPEED FREIGHT



Here's why AAR Solid Bearings  
have no equal for railroad rolling stock

**MAXIMUM DEPENDABILITY:** In daily operation, an unequalled record for journal bearing performance.

**SMOOTHEST RIDING QUALITIES:** Lateral shocks are flexibly controlled — not rigidly opposed.

**LOWEST ACCELERATING AND RUNNING RESISTANCE:** Glides on a single film of oil, like a skater on ice.

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**UNIVERSAL INTERCHANGEABILITY:** Simple — dependable — economical — safe.

**LIGHT WEIGHT:** Saves many tons of excess dead weight on every moving train.

**ROCK BOTTOM COST:** Saves over 25% on initial car cost — 96% on bearing replacement.

The Illinois Central pioneered high speed freight... put the MS-1 Chicago to Memphis "overnighter" in service back in 1936. Now there's a whole fleet of overnights on the "Main Line of Mid-America"— speeding merchandise in any kind of weather — with a convenience and dependability unequalled by any other form of transportation.

Like all of America's high speed merchandise freights, these famed Illinois Central trains are solid-bearing-equipped. That's because low-cost solid journal bearings are as basic and vital to our railroads as the railroads themselves to our defense and economy. You can take the maximum load, make the fastest schedule. You save up to 1500 pounds dead weight per car... and get the smoothest ride on any standard truck. Best of all, you're sure of remarkably high bearing efficiency, *at lowest possible cost*.

For complete details, get your free copy of "The FACTS About AAR Solid Journal Bearings." Just write a post card or letter to Magnus Metal Corporation, 111 Broadway, New York 6; or 80 E. Jackson Blvd., Chicago 4.

**MAGNUS METAL CORPORATION**

Subsidiary of NATIONAL LEAD COMPANY

## KEYSTONE OF THE ARCH—THE SUPERINTENDENT AND HIS ASSISTANTS

There aren't any people in or around the railroads who have anything like the power over the industry's future that is possessed by the superintendents and their immediate subordinates—the trainmasters, division engineers, master mechanics, road foremen and their assistants in local management. These are the men largely responsible for the quality of performance of individual employees—and hence for the degree of satisfaction which the industry affords to its customers. If cars are switched promptly, and gently, and moved without delay, it will be mainly because of the kind of supervision exercised by these local officers. Passenger trains will not run on time and the passengers are not likely to be treated with courtesy, without constant vigilance on the part of the supervisory forces.

### **Where the Credit Belongs**

If union relations are free from practically all friction except that engendered at the national level, then it will be the understanding and tact of local railroad officers which will deserve most of the credit—regardless of whether it is bestowed or not. If local shippers, newspaper editors and civic leaders are friendly to the railroads and esteem their service to the community at its true worth, then it will be because the home-town rail-

road officers have taken the pains, first, to have informed themselves on these matters and, second, to have learned how to tell the story convincingly to their neighbors.

No enterprise can run without a head. The top managerial and departmental officers are indispensable. There are great programs for physical improvements and financial readjustment which are important to the future of individual railroads and the industry as a whole, which only top management can originate and carry out. But brilliance at the top and the large ventures conceived there can, of themselves, accomplish nothing toward achieving satisfactory results. A lot of new equipment, easier grades, and a big reduction in fixed charges will not induce railroad prosperity five or ten years hence, unless today's customers approve the efforts currently being made to serve them; unless employees are being shown by example the benefits of fair dealing; and unless local community leaders have positive reason to respect the intelligence and public spirit of railroad management, as they witness it in operation at the local level.

### **Effective Example**

The writer of these lines for most of his life knew a railroad superintendent who served effectively in that capacity for more than thirty years. From the beginning

this superintendent dealt successfully with employees, sensing easily whether a situation required firmness or leniency, or a judicious mixture of the two. He got along well with the road's big customers on his division. Only in one aspect, at first, did his performance fall short of the ideal—that is, he had no native instinct for cordial community relations. He didn't know one prominent citizen from another—he ignored them all, not from aversion, but from his deep preoccupation with "running his division" seven days a week. Later on, he overcame this deficiency and was recognized as something of a local oracle on transportation questions. He accomplished this, not by prompting from his superiors, but by self-education in his duties, an important element of which was his faithful reading of every issue of this paper—a fact which may be recorded here without immodesty, since it happened long ago.

#### **The Need to Belong**

This superintendent *belonged* to management. There never was any doubt on that score in his mind, or in that of his superiors, his shippers, his employees or his fellow-townersmen. Not only that, but the trainmasters, master mechanics, division engineers and other supervisors who worked under him identified themselves with management too. They got this feeling about themselves, because their superintendent discussed management problems with them—not just the division's problems, but the problems and goals of the railroad as a whole, and of the industry as a whole. He got this information on his own initiative—not by having it formally inculcated in him by his own superiors, although he doubtless learned a lot from them through imitation.

No one thing would, perhaps, be more helpful to the railroads than to secure a greater feeling of *belonging* on the part of all personnel, but especially by those in supervisory positions. There is no urge stronger in an individual associated with an organization than his desire for a feeling that he is really accepted as an essential part of it.

If supervisory forces are not given sufficient occasion to acquire the feeling that they belong to management, they soon wind up belonging to a labor union—an affiliation which is the complete negation of the management function which they are employed to perform. Belong to something they must—it is a gnawing need no less insistent upon fulfillment than the craving for food, or for companionship of the opposite sex. If the attitude of "belonging to management" were general throughout railroad supervisory forces, most if not all the industry's "political" problems would diminish to the vanishing point—all of those troublesome questions which hang upon employee relations, customer relations and community relations. This would follow, because no supervisor can really get the feeling that he is part of management until he begins to see his duties as management sees them—from the standpoint, that is, of their relationship to the welfare of the enterprise as a whole;

and the relationship which exists between the company's welfare and that of its employees and patrons.

The superintendent is the obvious key to this crucial situation, because he is the only part of management most supervisors know well. What the superintendent knows, and has learned how to impart; what the superintendent reads and can inspire his superordinates to read; the extent to which top management hearkens to the superintendent when he reports on the help required to keep the supervisory forces in the attitude of management, instead of in that of management's critics—all these things are going to have a lot to do with the situation of the railroads as a whole, and the relative position of the individual companies, a decade from now. In encouraging superintendents to play well their vital role in this process, example, as always, will be a more effective teacher than precept.

It has been truly said that one of management's primary duties is the selection and training of its successors. No manager, however brilliant the contemporary results he achieves, can be recorded as a genuine success until the performance of those who come after him is assayed. The superintendent and his subordinates are not only the mainstay of current performance—they are also a company's only dependable source of supply for tomorrow's top management. From the quality, attitude and training of these men today, then, a railroad's probable future can be pretty safely predicted.

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## **CAN THE WEIGHT TREND BE REVERSED?**

An article on page 42 of the March 19 issue of the *Railway Age* discusses the possible tangible savings in operating expenses and carrying charges if the weight of passenger cars could be reduced by better design without appreciably increasing the per-pound cost of the material which goes into the car. The experience of the railroads and the car builders has not been such as to encourage the belief that weight can be saved without the employment of relatively high-priced materials. Indeed, a review of passenger-car weight trends since 1935—when efforts at weight reduction were getting under way—indicates that the trend in weights has been upward.

The lightest weight in coach designs was attained during 1936 to 1938 by the Chicago, Milwaukee, St. Paul & Pacific when coaches weighing less than 50 tons were built of low-alloy, high-tensile steel by welding. Stainless-steel coaches for the Reading "Crusader" built in 1937 were also under 50 tons. All of these cars were approximately 80 ft. long, coupled. By 1939 "light-weight" coaches were running 51 to 53 tons and since then have passed the 60-ton mark, with dome cars weigh-

ing over 75 tons. These cars are practically all 85 ft. long, coupled.

When weights were reduced to the point where four-wheel trucks replaced six-wheel trucks in the early lightweight cars, journal sizes were 5 in. by 9 in. Increased weights now call for journal sizes of 5½ in. by 10 in. and 6 in. by 11 in.

In 1935 the Mechanical Advisory Committee in its report to the Federal Coordinator of Transportation presented a study of the possibility for lightweight design employing low-alloy, high-tensile steels. The committee estimated that a lightweight coach could be built to weigh 96,900 lb., as compared with a heavy car of 140,000 lb., a saving of 43,100 lb.

The largest decrease in the committee's lightweight design was in the car structure, the weight of which was estimated at 29,400 lb. In the 70-ton passenger car the body structure weight was 56,000 lb. The equipment, finish and furnishings of the lightweight car were estimated at 36,500 lb.; in the heavy car they weighed 49,000 lb. The trucks of the lightweight car were to weigh 31,000 lb.; those for the heavy cars ran to 35,000 lb. Thus, the equipment, finish and furnishings, and trucks in the lightweight car each account for more weight than the car body.

The problem of reversing the upward trend of passenger-train car weight is made particularly difficult by the constant development of new functions for the comfort or entertainment of passengers, each of which adds the weight of another piece of equipment to the car. With trucks accounting for 20 tons of the 60 or more tons total weight, and equipment, finish and furnishings substantially more than half of the remainder, the opportunity to effect further substantial weight reductions by refinement of structural design without the use of relatively expensive materials is not large. It is encouraging, however, that efforts in this direction—and in the direction of reducing weights of equipment and furnishings—are still being made.

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## MACK TRUCKS AGAIN WAVE A THORNY OLIVE BRANCH

It looks as if we may have to set aside space every week to report the warfare being carried on by Mack Trucks, Inc., in the alleged interests of transportation peace. Week before last it was Vice-President Dodge who let go the barrage. This time it is the very highest of the company's brass which has dropped the pacifying block-buster, namely E. D. Bransome, president of the concern. He held forth on March 20 at a luncheon of the New York Board of Trade, to an audience which filled the grand ballroom of the Waldorf-Astoria Hotel. The luncheon must have cost somebody quite a lot of money. It couldn't very well have been Mack Trucks

which picked up the check though, could it?—because Mr. Bransome makes it quite clear that nobody in the transportation business but the railroads ever stoops to spending money for propaganda.

Mr. Bransome is aggrieved because the operators of big trucks are "rugged individualists," while today's railroaders are merely the "*successors to pioneers*"; and these "*successors to pioneers*," the wretches, are questioning the weight and size of the vehicles tolerated on the highways. "Have you ever heard," he plaintively inquired, "of truckers trying to limit the size of railroad engines and cars?" It didn't occur to Mr. Bransome to mention the controlling fact that trucks operate on public roadways while cars and locomotives move only on privately provided roadways—an omission which gives an accurate appraisal of his quality of candor.

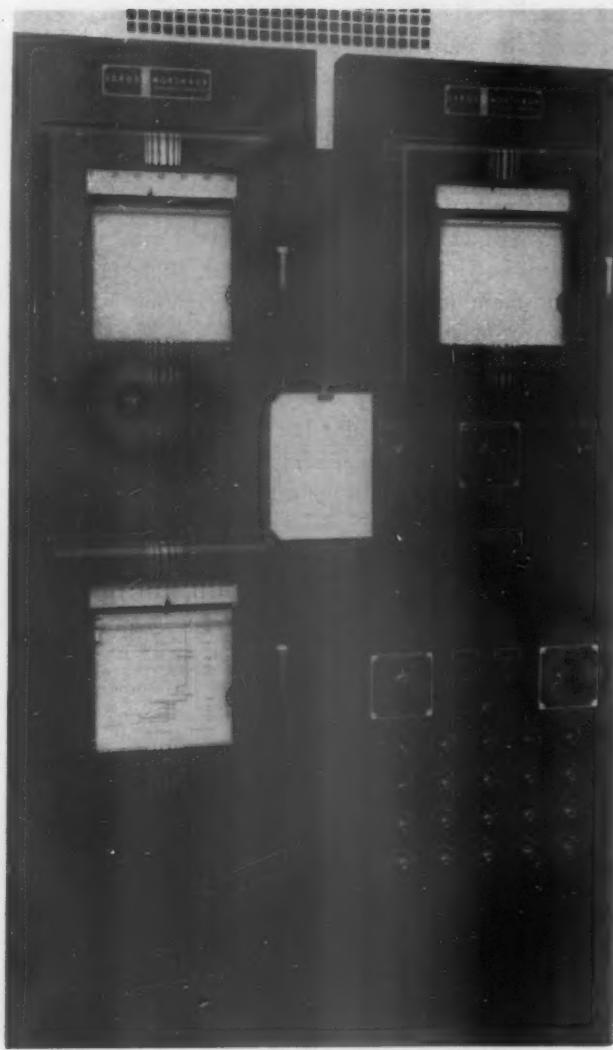
The heat is undoubtedly on Mr. Bransome and his heavyweighted cohorts; and he is trying to persuade himself and his audiences that the primary blame rests on the railroads. He neglects, for example, to mention the fact that there was no railroad participation whatever in the recent Maryland road tests—although Mack Trucks participated by supplying one of the test trucks. These tests showed conclusively the degree to which heavily laden vehicles are the ruination of even strongly built roads. Also, when he attempts to put his "rugged" truckmen in the same class with the early railroad pioneers, he conveniently neglects to consider the fact that the railroad pioneers were genuine innovators—providing all the plant needed for their business, while Mr. Bransome's truckmen conveniently wait for the taxpayers to do the pioneering in the road-building end of their enterprise, before they make a pioneering down payment on one of Mr. Bransome's trucks.

Mack's president exults in the strange ukase put out recently by Commissioner Knudson, attacking state restrictions on overladen trucks; and he pleads for peace in transportation—strictly on his own terms which include, of course, freedom from "prejudicial statutory limitations." He says "we must learn to build roads that are built like Mack trucks." Who is to pay for such roads he neglects to specify, but the implication is pretty clear that he and the truckmen he speaks for don't intend to. His formula for peace is, thus: *You must legalize trucks as big as it suits me to build them, but with no increase in fees for road-use by such trucks.* If the railroads won't be pacified on these terms, then Mr. Bransome and his pals "are not looking for a fight, but we're willing."

He does not disclose whom he and his rugged associates are going to beat up, if it turns out that their principal adversaries aren't the nefarious railroads, but, instead, the state highway departments, the organized taxpayers, and other highway users. Which is, of course, the actual fact. If there weren't somebody a lot more politically potent than the railroads who object to road-busting trucks, then the Mack people wouldn't have to be hiring halls and buying expensive victuals and liquor to get people to listen to their oratory.

# Train Performance Calculator

**The Pennsylvania develops an electro-mechanical "brain" for computing the optimum performance of all kinds of motive power**



Front view of the new train performance calculator

An electro-mechanical train performance calculator was recently placed in service by the Pennsylvania in Philadelphia, Pa. Employing measuring and recording instruments, this device quickly computes and records information required to determine the economics, schedules, and proper tonnage ratings for all types of motive power. Such information was previously assembled from a large number of tedious, step-by-step mathematical calculations. This machine performs and

Material for this article was taken from a paper describing the device in detail, which was presented by S. V. Smith, assistant electrical engineer of the Pennsylvania, at the Winter General Meeting of the American Institute of Electrical Engineers in New York, January 22-26.

records the necessary calculations for a high-speed passenger train in actual train running time.

The procedure generally followed to calculate the performance of a given train over a given route is first to assemble pertinent data relating to motive power tractive force, train resistance, effective track grade, operating restrictions, and schedule stops. Next, train acceleration at any speed and the limitations on use of acceleration are determined. Thereafter, the principles of mechanics are applied to calculate step by step the speed developed, the time required, and the distance covered by the train as it is assumed to move along a selected route. Step-by-step calculations are tedious and consume considerably more time than the actual train would need to operate over the route.

In this calculator, net acceleration is expressed as a small voltage. As this voltage is measured, it is mechanically integrated with respect to time to control a second voltage proportional to speed. Speed voltage is, in turn, measured and integrated with respect to time. The speed integrator, through relays, controls the speed of a motor to advance a chart at a rate proportional to distance covered.

The basic elements of the calculator are three self-balancing, potentiometer-type, curve-drawing instruments, electrically interconnected, and a low-energy auxiliary circuit, all of which are mounted on two steel panels. The auxiliary circuit contains apparatus necessary to represent effective forces which influence the movement of the train and to simulate three types of train motion: acceleration, operation at fixed speed, and braking. All the electrical energy required to operate the machine is supplied through two three-ampere fuses from the 110-volt office lighting system.

## Instruments

The three instruments are an acceleration recorder, a speed recorder, and a distance recorder. These instruments, as well as the auxiliary apparatus, were previously developed for other applications and have been adapted to the calculator with no changes in basic design.

The acceleration recorder measures a voltage proportional to the totalized motive power and track acceleration forces, or to the braking force, and provides a permanent record of train acceleration at any time. A pointer attached to the recording pen carriage indicates instantaneous acceleration along the lower instrument scale which is calibrated from minus 2.4 to plus 2.4 m.p.h. per sec. A mechanical integrating device operates in conjunction with the acceleration measuring mechanism and moves a contact over a straight section of slidewire, located behind the upper instrument scale. This contact is attached to a pointer which indicates speed on the upper instrument scale calibrated from 0 to 120 m.p.h. The straight slidewire transmits to the speed recorder a voltage proportional to speed.

The speed recorder measures this voltage and pro-

vides a record of train speed at any time. A pointer associated with the pen indicates speed on a scale calibrated from 0 to 120 m.p.h. This instrument contains two retransmitting slidewires and a mechanical integrating device which are positioned by the speed measuring mechanism. One slidewire transmits to the acceleration recorder a voltage proportional to acceleration; the other transmits to the distance recorder a voltage proportional to speed. An integrating device, through relays and cam-actuated contacts, regulates the speed of the special chart-drive motor in the distance recorder.

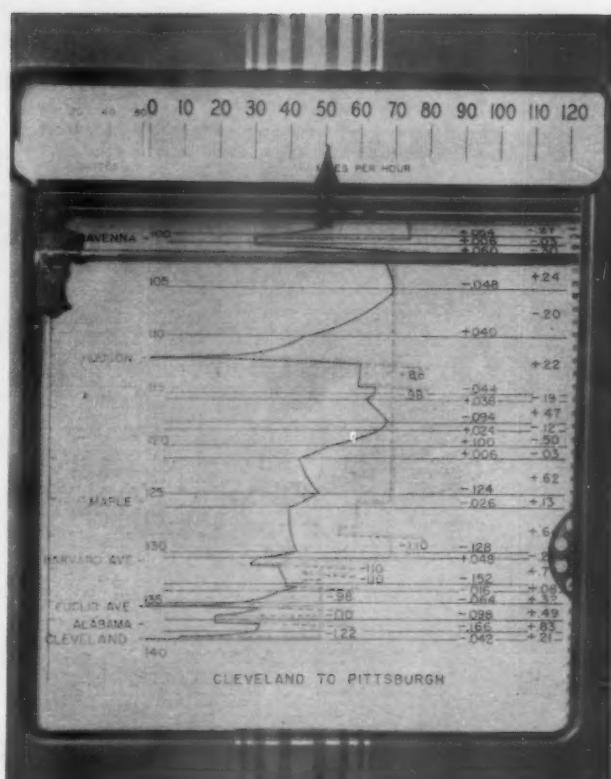
The distance recorder measures speed and provides a permanent record of speed on a prepared chart which represents the track. A curve-drawing pen represents the train. A pointer moving with the pen indicates speed along the right-hand section of the instrument scale, calibrated from 0 to 120 m.p.h. A solenoid-operated pen, located under the left-hand section of the scale and actuated by a timing motor, provides a permanent record of time by drawing short horizontal lines at five-minute intervals. The left-hand sections of the scale and the chart are ruled from 0 to 60 minutes. This portion of the chart is completed manually, to show time in hours and minutes at any location, following conclusion of the calculation. The special chart-drive motor advances the chart in steps of 0.02 in. for each 0.1 mile of calculated performance.

### Operation

Prior to making a calculation, the known data must be prepared and placed in the machine. The track information is plotted to scale on the speed distance portion of the chart in the distance recorder. It consists of effective track grades, equivalent acceleration values, speed restrictions, braking lines, required braking acceleration values, mileage designations, stations, and interlockings. The train information is reduced to terms of net acceleration on level tangent track. This information is translated into proportional voltage by adjusting rheostats, most of which are connected between fixed positions along a slidewire which is positioned automatically by the speed measuring mechanism.

After the known data have been placed in the calculator, the power switch is turned on. Calculation and recording are fully automatic except for changes of track grade and for changes in type of motion. This information is supplied to the calculator by adjustment of a-rheostat to regulate a voltage proportional to the acceleration produced by effective track grade (or proportional to the retardation required for braking) and by operation of a three-position switch to simulate type of motion. Progress of the speed trace on the prepared distance chart determines the nature and extent of each adjustment. One man can handle both adjustments without difficulty. He must, however, carefully follow the speed trace and other indications on the speed-distance chart.

The train performance calculator has been used extensively by Pennsylvania engineers to analyze and to predetermine performance of diesel-electric, straight electric, and steam locomotives, and of multiple-unit cars. It is particularly effective in making comparisons between different types and sizes of motive power on the same train. No special allowances are necessary for track conditions, locomotive handling, or equipment defects, the results being wholly dependent upon information supplied. A number of road tests under specified conditions have been confirmed with the calculator. Momentum operation of long freight trains on short ruling



Speed-distance chart in the distance recorder

grades and the use of short-time ratings on electric propulsion apparatus have been investigated to a much greater extent than was considered practicable with step-by-step calculations. Noiseless operation and simple controls make the new train performance calculator a valuable addition to a modern railroad engineering office.

"The essence of democracy is the acceptance of responsibility. It is our only hope in solving our difficulties, both on the international scene and in our local life.

"The management of your railroad has assumed responsibility for efficient operation; for adopting, as soon as possible, any new discovery that improves the operation; of providing safe physical condition of property, tools and equipment; of dealing fairly with labor in all matters pertaining to wages, working rules and conditions, and it stands between responsibility to labor to pay the highest wages possible and responsibility to the shareholder to return a fair dividend. We also recognize our responsibility to the communities we serve. And we are responsible for looking ahead.

"The success or failure of management is shared by labor and the success or failure of labor is shared by management. Both are mutually important for successful operation. At times in the past, both have made the mistake of permitting politicians to solve mutual problems for them. The American system is that of free enterprise, cooperation and not only a fair wage, but also a fair profit.

"Both management and labor have a responsibility to the public, and they are equally responsible. Careless indifference of some employee to the needs of the shipper can spoil the most perfect of public relations policies. The best advertisement that any company can have arises from the teamwork of all in trying to adequately serve the public needs in the territory served." — Paul H. Van Hoven, president of the Duluth, Missabe & Iron Range, before the D.M.&I.R. Veteran Employees Association at Duluth, Minn.



ROUTE OF THE GREAT NORTHERN'S "INTERNATIONALS." A fare cut of 32 per cent, fine new equipment and faster and more frequent schedules have increased revenues on Seattle-Vancouver run more than 200 per cent in recent months, compared with the old service

## Business on "Internationals" Better Than Expected

**Great Northern has had to add a car in Seattle-Vancouver service to handle traffic developed by low fares, frequent service and ultra-comfort**

When the Great Northern placed in service its new "Internationals" between Seattle and Vancouver on June 18, 1950 (see *Railway Age* for July 1, page 48), the road's management believed that the four passenger-carrying cars on each train would be sufficient. Management was too conservative. Not long after the inaugural date, it was necessary to add a coach to the noon run in each direction, using for this purpose the Hill "pendulum" car operated by the N.P. in pool service between Seattle and Portland and a coach used to "protect" the transcontinental "Empire Builder."

Rejuvenation of the service between Seattle and Vancouver was accomplished in two phases — which the road considers of equal importance. Effective January 15, 1950, one-way and round-trip railway fares were reduced by 32 per cent, resulting in a passenger rate of 1.7 cents a mile, one-way, and 1.5 cents round-trip. The resulting fares were exactly 10 per cent below the existing bus fares at all stations en route. As described in *Railway Age* of June 3, 1950, page 50, the reduction brought immediate returns in increased patronage and revenues. In February train-mile earnings on this run — with



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**EFFECT OF FARE CUTS ONLY—1950 vs. 1949**

	Average Train-Mile Earnings Seattle and Vancouver (Per Cent Change)	System Passenger Revenues
January	+17.6	-16.8
February	+17.7	-8.9
March	+23.7	-11.9
April	+32.5	-15.6
May	+21.2	-23.4

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half each day over the 155-mile route. Together they provide a daily service of three round trips, with departure from Seattle at 7:45 a.m., 1:30 p.m. and 6:00 p.m., and from Vancouver at 8:10 a.m., 12:30 p.m. and 6:25 p.m. The schedule time for all trains is 3 hours 55 minutes, including six intermediate stops. In addition there is operated each way a local train with conventional equipment. Prior to the inaugural of the "Internationals" the service comprised a morning and evening train in each direction, with a schedule northbound of four hours 30 minutes, and southbound of four hours 25 minutes and four hours 20 minutes, respectively.

**Effect of Service**

A three-weeks' strike of switchmen on the G.N., in July 1950, which reduced "International" service to one train each way daily, operated by supervisory personnel, raised havoc with the first full month of operation of the new equipment. Thereafter phenomenal increases in traffic and earnings have attested the success of the service. Nevertheless, valid comparison of its patronage with the Seattle-Vancouver service prior to fare cuts, new equipment and schedule improvements, is impossible prior to October, because there occurred in the summer and early fall of 1949 a bus strike and tie-up which threw an abnormal load on the existing rail service.

Preliminary October figures prove that increased patronage on the "International" is not the result of accident. The number of tickets sold at and between all agencies on the Seattle-Vancouver route was 224.5 per cent greater than month than in October 1949, and revenues were up 156.2 per cent. In November, the number of tickets sold was up 278.4 per cent, and revenues was 213 per cent higher, compared with a year previous.

A peculiar but important factor in the fast schedule and excellent on-time performance of the "Internationals" is the fact that customs and immigration men of both Canada and the U. S. perform their work on the train while it is in motion and almost never require that it be stopped at the international border. Buses and private autos, in contrast, are subject to lengthy delays at border checking points. Customs and immigration men are willing to cooperate because, in the new "International" equipment, the railroad has provided them with an interview room, with shelf, desk and chairs where they may talk to passengers needing special attention and rest themselves between examinations. The design and arrangement of the interview room were determined only after railroad personnel had an opportunity to sound out the desires of most of the customs and immigration officers in the area. The railroad also provides customs men with paper seals which they may place over the openings of passengers' luggage after inspecting it at the station gate at Vancouver or Seattle.

In anticipation of the fast operation of the "Internationals," work was started readying the roadbed more than a year before the service actually started, an ac-

complishment which made it possible to raise the maximum speed limit shortly before the new equipment was placed in service.

The "Internationals" have proved to be important builders of traffic also for the two transcontinental passenger trains operated by the G. N. Both the "Empire Builder" and the "Oriental Limited" reach Seattle from the north, the main east-west line joining the route of the "Internationals" at Everett, 33 miles north of Seattle, and a station stop for the "Internationals." The noon "International" southbound makes a direct connection at Everett with the eastbound "Empire Builder" and the northbound noon train to Vancouver makes a connection with the westbound "Empire Builder" at the same point. It is to these noon trains that an extra coach each has had to be added.

**Dining Facilities**

The former conventional trains ran with full dining cars and crews. Despite the fact that service frequently has been increased 50 per cent, the "Internationals" save money for the railroad on food service. Their "coffee shop" cars are more efficient and are able to meet passenger needs completely with a 5-man crew, including the steward, compared with an 11-man crew on a dining car. It is impossible to compare the number of meals handled by the new "Internationals" with that on the former trains, because the latter used to handle special tour party cars which added considerably to dining car revenues. The G. N. will not handle party cars on the new "Internationals"—indeed it refuses to cut into their consist for any purpose whatever. Party cars and tourist sleepers are now handled on the conventional train between Seattle and Vancouver, and their occupants do not utilize the meal service facilities of the "Internationals." Since, in season, party cars average two a day, any comparison between the "Internationals" and the old trains would give an untrue picture.

Promotion of the Seattle-Vancouver service has been "cut to suit the cloth." The following sums were spent in newspaper advertising in 1950 to feature reduced fares:

January	\$2,518
February	2,089
March	1,764
April	1,360
May	1,445

In addition \$900 was spent during this period for radio advertising.

To introduce the new equipment and schedules since June 18, advertising costing \$600 was placed in July, and it has been running at the rate of about \$450 in subsequent months.

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**"WE WONDER! . . .** What would be the reaction of railroad labor leaders and the public in general if, after negotiating a wage controversy for 20 months and agreement having been reached, railroad management announced the agreement had to be approved by the boards of directors of 132 separate railroads and the agreement was subsequently rejected by them? Yet, that is precisely what the general chairmen of four operating crafts from 132 individual railroads did when they rejected the wage-rules agreement that their national officers had initiated in Washington last December. Power of attorney is lodged in the three regional negotiating committees representing management of 132 railroads . . . this committee has full power to act . . . their action is binding on management of each railroad whether they like it or not. Isn't it only fair to insist that rail labor leaders come to the negotiating table clothed with similar authority from the members they claim to represent?"—Missouri Pacific "News Reel"



Features of this typical postwar refrigerator car are: insulation, 4 in. in side walls and 4½ in. in floor and ceiling; air-circulating fans; convertible bunkers; side-wall flues, and long-travel truck springs

## Refrigerator Cars—A Progress Report

**Older cars should be modernized and 35,000 new ones built to provide at least 100,000 serviceable reefers**

By JOHN N. KELLEY

Manager Fruit Transportation, Fruit Dispatch Company, and  
Chairman, Refrigerator Car Committee,  
United Fresh Fruit and Vegetable Association

Since my last report to our association, I am able to say that progress in the development and construction of new refrigerator cars, though much too slow, has continued along modern lines. Our car-test program, that of the U. S. Department of Agriculture, the Association of American Railroads, and those of individual companies,

have contributed valuable information about the performance and characteristics of cars presently in service, and have indicated the type of developments that should be undertaken in the future.

The car-building programs, now planned or in the process of fulfillment by most of the major car lines, promise eventually to replace a substantial number of the approximately 60,000 prewar, non-fan refrigerator cars still in service. We hope that cars equipped with air-circulating fans and easy-riding trucks will be the rule rather than the exception.

The refrigerator car has been undergoing spasmodic

development since before 1900. Occasional improvements in design have gradually resulted in better equipment for transporting perishable freight. The postwar years, from 1946 to the present, are proving to be one of the most fruitful of these development periods.

#### A 50-ft. Reefer?

It is the almost unanimous opinion of perishable food shippers that the standard postwar reefer, with air-circulating fans, shock-resisting trucks, heavier insulation, and other modern devices, is the best our industry has ever had.

Recently, however, well intended suggestions have been made for a more radical change in the refrigerator car—a change from the present standard length to a 50-ft. vehicle equipped with overhead bunkers. Such a car, some contend, would still further satisfy our industry's needs by prompting lower freight rates through larger load capacities.

Whether these requests are justified; whether the changes requested can be considered progressive; and whether, in short, they represent the needs of the fresh fruit and vegetable trade, as well as most other shippers of perishables, will be the subject material for discussion.

There can be little doubt on anybody's part that there is still a shortage of refrigerator cars (the present building programs of the major car lines give evidence of this), but whether new construction should concern itself with substituting the 50-ft. giant for the standard 40-ft. reefer, is an issue open to considerable doubt.

In an effort to ascertain the needs and opinions of perishable food shippers, one of the leading traffic experts in the fresh fruit and vegetable industry circularized the entire membership of his organization last summer, requesting information along the following lines: (1) The type of refrigerator car best suited to their needs; (2) would they normally prefer to use the giant type of car; (3) would they be agreeable to increased carload minimums as a result of placing giant cars in service; (4) what would be the effect on their business of having to load cars heavier than now required; (5) have present minimum loads caused any trade resistance; (6) might they lose private sales opportunities if required to handle shipments of heavier weights in giant cars; (7) what is their experience as to the condition of ladings at destination, arriving in standard reefers under normal transportation service; and (8) their opinion of the new fan-type, standard refrigerator cars.

Answers to the above questions were practically unanimous: (1) preference is for the standard, fan-equipped car; (2) many said the giant car would be a sales handicap; (3) almost universal objection to heavier loads; (4) the giant car would result in the loss of many small markets; (5) private sale markets have trouble in disposing of present minimum loads; (6) many would either quit buying or switch to trucks.

As to the seventh question, the typical answer was that, where products are of proper maturity and condition when shipped, adequately cooled and moved in standard, fan-equipped reefers, they have arrived in almost 100 per cent good condition. As to the eighth question, the universal opinion was that the present standard, fan-equipped car is, beyond any doubt, the best this industry has ever had.

In addition to this evidence from a wide cross-section of the industry, I have received numerous letters from other leading shippers of perishable foods, expressing the same opinions and concern about future refrigerator car-building programs. The consensus is that a 50-ft. car

could not adequately serve the ever-increasing number of small shippers and markets.

These small shippers would be forced to load mixed cars, to load less than capacity carlots, or to give up carlot shipments altogether, if required to rely on giant reefers. If the present fleet of 40-ft. cars is to be supplemented with a new fleet of different size, then this new group should, if anything, be of smaller size units to accomplish distribution still wider than at present.

#### Small Shippers Important

Aside from limitations imposed by its size, we must also consider the 50-ft. car from the standpoints of construction and operation. To date, the 50-ft. overhead-bunker car has been used in the United States primarily for the shipment of frozen foods, which for the first six months of 1950 represented less than one-half of one per cent of all refrigerator-car loadings. For this and similar special services the giant car may have a place.

The general use of an overhead-bunker giant car for fresh fruit and vegetable shipments would mean that the full potentialities of the car would not be utilized; that the money invested in two of these 50-ft. giants (\$26,000) might just as well be invested in three 40-ft. postwar standard reefers at \$28,500. Thus, for \$2,500 more, we would have three cars capable of moving considerably more freight than two of the oversized reefers.

As V. R. Hawthorne, executive vice-chairman, Mechanical Division, A.A.R., aptly put it at our first joint meeting: "Furthermore, we agree wholeheartedly with the idea of keeping general service cars, if at all possible, especially in a time of war and stress like this when the all-purpose car has been our salvation. To be real plain, special cars are a pain in the neck. They never are where you want them when you want them and it means a lot of uneconomic empty mileage to get them where you can use them. We just hope that we can work out with you people a general service car."

In addition to cost, we must also consider the giant car from a standpoint of servicing and maintenance. The overhead-bunker type, with eight to ten bunkers, is considerably more difficult to ice than the standard car, in which all necessary ice can be loaded through two hatches.

Here again I would like to quote from a recent letter received from Dr. Mary E. Pennington, a noted transportation consultant:

"So far as the size of the car is concerned, I am in contact with shippers of very perishable goods who many times could not accumulate sufficient tonnage to use one of the long cars, but since their commodities are extremely perishable it is to the advantage of all concerned to ship by carload and for such people the standard car is just as large a car as they can manage to fill."

"I was much pleased when your committee, working with the railways and the U. S. Department of Agriculture, agreed upon a standard car of definite dimensions. This is something which the transportation workers in the Department of Agriculture began to discuss with the railways as far back as the early nineteen hundreds. Some progress was made but it remained for your committee to formulate standards and the railways in cooperation to build the cars. I hope nothing will upset the progress which has been made in the standardizing of car dimensions."

Maintenance costs for the overhead type of bunker are much higher than those for the end type, because of their radically different design. There is, in the overhead bunker, from four to five times more galvanized iron than in the conventional type. In the overhead type, more metal



comes in contact with water or brine. These two factors lead to frequent and expensive repair bills.

In summary, I will mention that the advantages of the standard, post-war reefer over the 50-ft. giant, plus the wonderful record it has made for itself, have earned for it the full recommendation of the United Refrigerator Car Committee. We on the committee feel it is the car which for years to come will best serve the shipper and the wholesaler.

#### **Developments Being Watched**

I don't mean to imply that the committee has closed its eyes to new developments in refrigeration and car design. On the contrary, we are eagerly watching the testing programs now under way by some of the leading car lines with mechanical refrigeration units, and we have always advocated devices such as Duryea underframes and long-travel springs, which make for smoother riding qualities. Improvements in car heating are also receiving our earnest attention.

I can also report that many of the car-building programs planned for the near future include the adoption of 6-ft. sliding doors and reinforced metal floor racks. The wider doors will facilitate palletized loading, and the stronger floor racks will easily support the weight of a fork-lift truck. All of these development programs and innovations have been worked out in cooperation with the United Refrigerator Car Committee.

Despite the progress made on car design by cooperative work with the carriers, and despite the fact that over 25,000 modern, fan-equipped cars have been built since the war, we still find ourselves terribly short of cars. Since the abandonment of car pooling, the car lines have been free to meet the requirements of the segments of the industry they serve, and for the nation as a whole the record is not a good one. Following a very successful cooperative effort in the matter of car design and initial construction, we feel that the railroads and private car lines have lagged in meeting our needs with enough serviceable equipment.

According to my information there are about 106,000

RS refrigerator cars reported to be in service on the railroads today. As far as I know, there is no exact figure on how many of these cars are out of active service, how many of them have been assigned to other than perishable traffic. However, I think it is safe to say that at the present time there are less than 100,000 RS-type cars actually available for the transportation of perishables. Probably 95,000 would be a safer figure. Of these 95,000 I understand (and I think it is generally agreed) that only about 65,000 are in really serviceable condition or, to put it bluntly, fit to be in this service. A little more than half of these are modern, fan-equipped cars.

Before the war there were approximately 124,000 RS-type cars in service, so it is plainly evident that we cannot keep pace with the growing demands for fruits and vegetables in a country whose population has increased so greatly, nor can we properly develop the improvements in the fresh fruit and vegetable industry that the several associations are working on for increased consumption, unless an adequate supply of the modern cars is built.

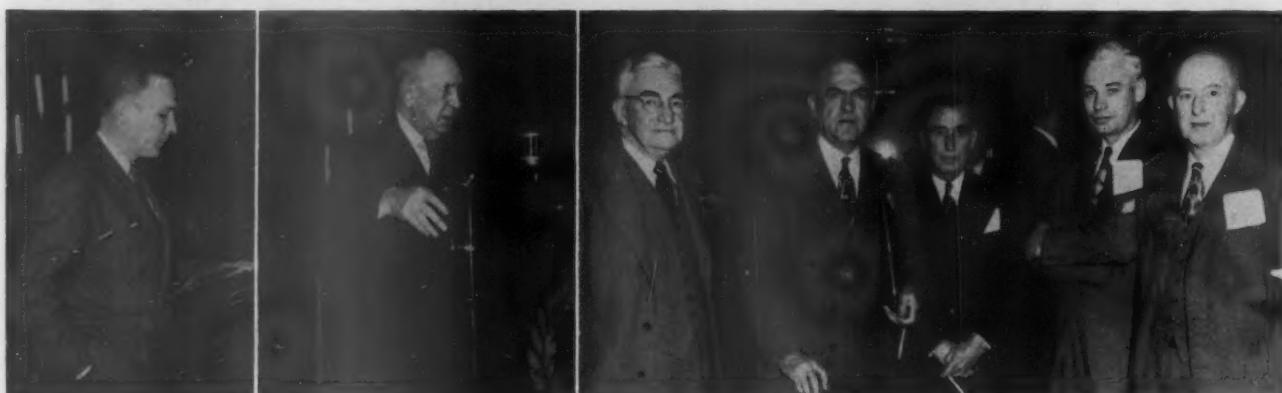
It is with considerable discouragement that we find ourselves again face to face with war conditions, steel allocations, the possibility of manpower shortages, heavier loadings, reduction in loading time limitations and the assignment of refrigerator cars to box-car service because of this emergency. We had hoped, with the way paved by industry effort for a car acceptable to all segments of the industry, that many more cars would have been built in the favorable period between the cessation of the war and this new emergency. Speaking frankly and bluntly, *we question if the railroads are doing their full share toward keeping up the car supply* by new building, rebuilding and rapid car repairs.

My opinion is that approximately 100,000 serviceable cars, if operated efficiently, would take care of our normal business. I have no way of estimating how many additional cars the war emergency may require. If this figure is correct, 30,000 to 35,000 new refrigerator cars would have to be built and added to the existing fleet and the older cars modernized. We believe it is not too late to start new construction and rebuild to modern standards the best of the older equipment.



Left—L. L. Adams, L. & N.; J. de N. Macomb, Inland Steel Co. (ret.); Armstrong Chinn, T.R.R.A. of St. L. Center—J. L. Rippey, N.Y.N.H. & H.; O. W. Stephens, D. & H.;

N. D. Howard, A.R.E.A.; Right—T. A. Blair, A. T. & S. F.; W. S. Boyce, Colorado Fuel & Iron Corp.; A. R. Wilson, P.R.R. (ret.)



J. M. Budd, G. N.

J. H. Aydelott, A.A.R.

W. T. Jones, Barco Manufacturing Company; S. R. Hursh, P.R.R.; H. S. Ashley, B. & M.; W. H. Ripken, Fairmont Railway Motors, Inc.; H. C. Archibald, B. & M.



J. A. Curtis, Pullman-Standard; H. J. Wechsler, Erie

F. M. Patterson, L. V.; G. A. Phillips, D. L. & W.

H. S. Loeffler, G. N.; G. M. O'Rourke, I. C.

G. P. Palmer, B. & O.C.T. (ret.); F. R. Layng, B. & L. E. (ret.)

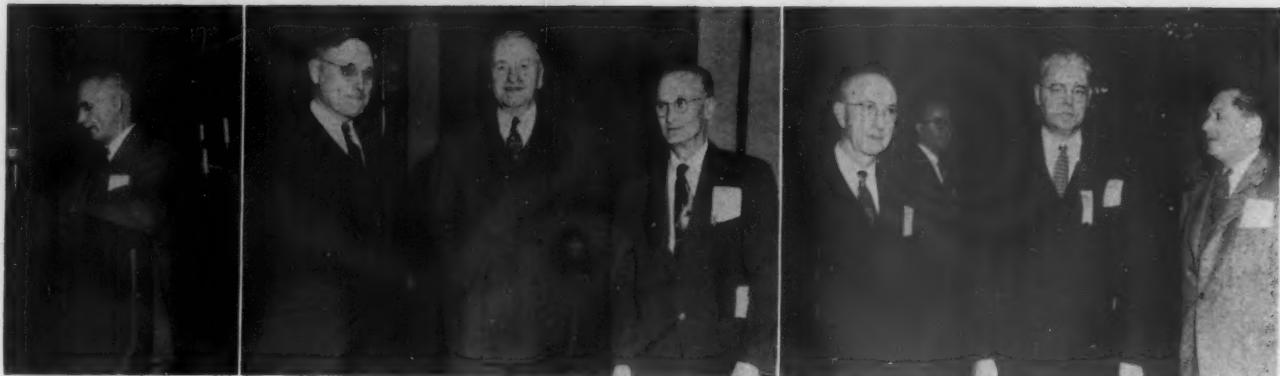


E. M. Loeks, C. & I. M.; H. H. Main, T. P. & W.

A. E. Biermann, T.R.R.A.; A. S. Krefting, M. St.P. & S.Ste.M.

S. F. Gear, I. C.; R. A. Van Ness, A. T. & S. F.

P. T. Trax, P.R.R.; C. G. Grove, P.R.R.



H. S. Loeffler, G. N. R. J. Gammie, T. & P.; J. C. Forbes, O. F. Jordan Company; J. R. Rushmer, A. T. & S. F. R. D. Ransom, C. & N. W.; B. R. Meyers, C. & N. W.; W. J. Hedley, Wabash

## Around and About the A.R.E.A. Meeting

*Informal "shots" of a few of the 1707 railway engineers and supply men in attendance at Chicago's Palmer House, March 13-15*



C. J. Geyer, C. & O.; E. J. Powell, Railway Maintenance Corporation; W. L. Heitzman, M. P.; O. E. Mace, C. & O. E. J. Ruble, A.A.R.; H. E. Wilson, A. T. & S. F.; N. C. LeClair, T.R.R.A. of St.L.; A. A. Sirel, A.A.R.; J. C. Bridgefarmer, T. & P.



F. J. Bishop, A. C. & Y.; F. W. Biltz, Reading; A. C. Clarke and E. H. Barnhart, B&O. K. H. Hanger, M.-K.-T.; C. B. O'Neil, Fairbanks, Morse; P. P. Wagner, M.P. J. C. Parsons, C. & O.; A. B. Pierce, Southern; J. E. Fanning, I. C.



A. R. Harris, C. & N. W.; E. A. Johnson, I. C.; W. E. Robey, A. T. & S. F.; C. H. Sandberg, A. T. & S. F. C. W. Russell, K. & I. T.; Col. Clark Hungerford, St. L.S. F.; J. S. Wearn, Southern; E. L. Anderson, St.L.-S.F.



The Canadian National's "Continental Limited" in Jasper National Park, Alberta



Aerial view of the Canadian Pacific's new St. Luc hump retarder yard at Montreal

## THE ROYAL COMMISSION REPORTS

*Unified regulation of transportation, freight rate equalization, uniform accounting system and many other recommendations made as result of special two-year study of Canadian transportation*

Unified single-agency regulation of all transportation; reorganization of the financial structure of the Canadian National; continued private ownership for the Canadian Pacific, and a broad program of freight rate equalization throughout Canada were among the principal recommendations of the three-man Royal Commission on Transportation whose report was "tabled" in the House of Commons of the Canadian Parliament at Ottawa, Ont., on March 15. The commission likewise advocated faster action in future general rate cases and modification of straight percentage rate increases, and suggested that the Canadian federal government pay some \$7 million per year toward maintenance of the so-called "bridge" sections of C. N. and C. P. transcontinental lines north of Lakes Huron and Superior.

Following submission of the report to Parliament, Dominion Prime Minister Louis St. Laurent said that legislation would be introduced during the present session to implement many of the commission's recommendations. A summary of the legislation which the government is expected to seek in the near future is included in the news section of this issue.

### **"All Questions of Economic Policy"**

The commission was established on December 29, 1948, to study and report on "all questions of economic policy within the jurisdiction of Parliament arising out of the operation and maintenance of national transportation," as an outgrowth of protests by all Canadian

provinces except Ontario and Quebec against general postwar increases in railway freight rates. The chairman of the commission was W. F. A. Turgeon, a member of the King's Privy Council for Canada; the other members were Henry F. Angus, professor of economics at the University of British Columbia, and Harold A. Innis, professor of political economy at the University of Toronto.

Its 307-page report—including separate concurring statements by Drs. Angus and Innis—was based on 138 days of public hearings held in all Canadian provinces, in the course of which the commission took over 24,000 pages of evidence and argument, received 143 formal submissions, and heard 214 witnesses.

### **Unified Regulation**

The commission found "no reason" for changing the present powers or duties of the Board of Transport Commissioners, which is responsible for federal regulation of railways in Canada. But it also stated that "the anomaly" of having "three separate bodies, each charged with the control of a part of Canada's transportation system . . . should give way to the constitution of a Central Authority which will be able to take in hand the major task of coordinated control." Such an authority, as envisioned by the commission, would assume responsibilities now vested in the Board of Transport Commissioners, the Air Transport Board and the Canadian Maritime Commission for regulation of, respectively, railroads, air lines and water carriers.

The commission made "special mention . . . of the desirability of bringing trucks within the same control and regulation as the railways," but "here," it said, "a great obstacle lies in the way. By far the largest part of truck traffic is intraprovincial and most of this intraprovincial traffic consists of private trucking . . . Only a small percentage is trucking for hire. All this intraprovincial truck traffic . . . is beyond the jurisdiction of Parliament, and this fact presents a barrier to co-ordination and integration of highway and railway services." To point up the "obstacle" to regulation of trucking, the commission stated that "there are in all Canada not more than 1,500 trucks engaged in interprovincial and international traffic, out of a total of about 50,000 for-hire trucks"; and that six of the seven provinces which had asked for appointment of the commission "stated that they would not agree to divest themselves of their exclusive jurisdiction over intraprovincial motor transport."

The report did, however, indicate clear recognition of the damage done to the railroads by unregulated truck competition, and suggested that such trucking as is subject to federal control be brought under regulation identical with that imposed on the railways. "There seems to be no valid reason," the commission said, "why those who carry on a business . . . in competition with others who are regulated in respect to their rates and operations should not be asked to submit to a similar form of control." But, it also pointed out, "whether or not" regulation "would work out to the advantage of the railways, as seems to be generally assumed, would remain to be seen in the light of experience."

### **Canadian Pacific**

In connection with coordination of transport regulation, the commission considered the "not novel" suggestion that the two major Canadian railways "be amalgamated under government ownership and operation,"

but reached the conclusion that "such an amalgamation would not be an effective remedy for the problems which are said to affect Canada's railway system at this time." There is, it had said earlier in its report, "no reason whatever to recommend either unification, amalgamation or public ownership of all railways in Canada."

The commission, on the other hand, disapproved the C. P.'s request for an amendment to the Railway Act which would, in effect, as the commission put it, have made that company a "statutory yardstick" for Canadian railway rates, and which would have established "a fair return on investment in railway property" as a "floor" for "just and reasonable rates." In this connection, the commission called attention to the fact that the United States Transportation Act of 1920, "which attempted to make a statutory 'fair return' rule" was found to be "unworkable."

### **Recapitalization of Canadian National**

Some 20 pages of the report were devoted to examination of the financial problems of the Canadian National, and to the following recommendations for their alleviation:

1. That the C. N. be reimbursed annually by the government for operating losses of the Newfoundland Railway & Steamship Services and also for capital expenditures in respect of such services.
2. That government loans totaling \$743,661,000 as of December 31, 1949, be converted into three per cent income debentures on which interest would only be paid if earned, and would not be cumulative.
3. That shares of the Canadian National Railways Securities Trust now held by the government be turned over to the railway in exchange for an equal number of shares of the company, to simplify its capital structure without changing its total capital or the government's equity therein.
4. That after payment of interest on debts due to the public the C. N. be allowed to accumulate out of each year's earnings a reserve or "something to come and go on"; alternative maximum limits for the reserve were also suggested.
5. That after payment of interest to the public and creation of such a reserve, an amount equal to three per cent of the then outstanding government loans, or the balance of earnings, whichever is the lesser, be paid to the government.
6. That, to the extent that reserves and surpluses have been accumulated, losses, if any, be charged against any accumulated reserves and surpluses; if no such reserves are available, such losses shall be reimbursed to the company by the government.
7. That any capital required to finance the company, in addition to funds derived from operations and from payments made under provisions of paragraph 6, be obtained by sale of bonds to the public and income debentures to the government.
8. That surplus earnings, if any, remaining after payment of interest to the public and to the government, and creation of reserves (paragraph 4) be dealt with at the discretion of company directors.

### **Rate Recommendations**

More space in the commission's report was devoted to freight rates than to any other single subject; while its rate recommendations were both numerous and varied in scope and application, it favored, generally, equalization of rates throughout Canada, retention of the special Crowsnest Pass rates on grain and grain products and of special competitive rates, and "tapering" of long-haul rates in general rate increases.

"The broad general principle of equalization," it

said, "is now accepted" throughout the country, but it pointed out that "exceptions to equality must necessarily be permitted" in the case of international or export and import traffic, competitive rates and agreed charges, and on railways not parts of the C. P. or C. N. systems "which may not be able to operate on rate levels in force elsewhere." "The objective of equalization," it added, "is something which can only be attained after considerable study by the Board [of Transport Commissioners] and by the railways." It made, however, a number of suggestions as to how "substantial progress towards the goal of equalization may be accomplished."

In line with its position on rate equalization, the commission likewise favored "a general revision of the freight classification," and "a uniform [carload] mixing rule of general application throughout Canada." It also said that "the influence of any transcontinental rate from the east to the British Columbia coast should be carried back in the rates to the intermediate provinces (including points in British Columbia east of the coast) on a basis not more than one-third greater than the transcontinental rate to the sea-coast," with the "same principle" applying also to eastbound competitive transcontinental rates. It found "no justification" for increasing the so-called Crowsnest Pass rates—special reduced rates originally established by statutory law on grain and grain products moving over specified routes or between specified points.

#### **Would Let Rails Meet Competition**

On the other hand, the commission strongly upheld the principle of competitive rates, i.e., rates "lower than the normal rates which would ordinarily be charged on the same commodities and [which] are made by the railways for the purpose of obtaining or retaining traffic which would otherwise be forwarded by competing transport agencies." "The railways," the commission said, "should neither be denied the right to meet competition, nor, when once they have decided to publish competitive tolls in one area, be forced by law to apply these same tolls to other regions where competition between transportation agencies is non-existent."

It rejected, however, a number of proposals for a change in the law relating to "agreed charges," i.e., rates "agreed upon by a carrier for the transport of all or any part of the goods of any shipper or group of shippers."

It likewise rejected a number of other proposals for various minor changes in rate-making laws or procedures.

It strongly criticized the "incorrect assumption" that "all freight can, under all conditions, bear an equal burden of increase" in horizontal rate increase proceedings. Such increases, it said, "although preserving rate relationships percentage-wise, disturb them in cents per 100 pounds (or other unit)" and thus "aggravate the disadvantage already suffered by long-haul shippers and consignees." Such disturbance of rate relationships as a result of horizontal percentage rate increases is, the board said, much more important in Canada than in the United States, because of (1) the longer average haul, and (2) the fact that major Canadian railroads serve the entire country and have no particular sectional interests. Complaints about the horizontal rate increase method, it added, were "many and varied," but "the answer . . . lies mainly with the railways themselves, since the means of removing the cause of dissatisfaction is within their own initiative." It also said, in this connection, that:

"The position of shippers and consignees in the regions of Canada outside the Central region [Quebec and Ontario] is bound to deteriorate with the continued application from time to time of rate increases which by their nature must become more and more burdensome as they spread out from the shorter to the longer distances. Since tapering was found to be fair and feasible in setting the original rates on certain important articles of transportation, it would seem to follow that, to some extent at least, increases in those rates ought to have been tempered by a similar process. The railways should be able to plan and should have planned their revenue applications accordingly."

The commission further said that "a suitable rate of tapering for the entire country should be an integral part of a uniform class rate scale."

#### **Favors Interim Rate Relief**

"When dealing with general revenue applications," the commission declared, "whether made by the railways for increases or by the shippers for reductions," the Board of Transport Commissioners "should proceed with the utmost possible expedition." "Nobody benefits," it added, and "there is a probability of irreparable injury" when determination of such cases is allowed to drag over a long period of months or years. This conclusion led to the definite recommendation that:

"Where the railways on the one hand, or applicants for reduction on the other, make out a *prima facie* case of need for increases or decreases in tolls, the board should consider the desirability of granting interim relief at the earliest possible date pending final disposition of the application."

The commission recommended a uniform system of accounts and reports for the C. N. and the C. P., and a simplified uniform system for other railroads, both to be prescribed by and carried out under the supervision of the Board of Transport Commissioners under a proposed amendment to the Railway Act. It discarded, however, a proposal to have revenues and expenses of freight and passenger traffic segregated from each other, observing that "the freight and passenger services are essential and if the passenger fares cannot be raised to produce sufficient revenues to enable the passenger traffic to pay its own way the freight traffic must bear the burden. The two services are so interrelated that segregation is not practical."

#### **Subsidy for "Bridge" Lines**

The commission also proposed greater leeway for the railroads in abandonment of unprofitable lines, and made the suggestion that the government should appropriate about \$7,000,000 a year as a "rough estimate" of the cost of maintaining transcontinental rail service over the "link" or "bridge" lines north of the western Great Lakes, which were defined generally as the trackage between Sudbury, Ont., and Fort William on the C. P., and "a corresponding extent of trackage on the C. N." This "necessary link," the commission said, "is called for not only by the requirements of the exchange of goods for commercial purposes, but also by those of our national defense structure. The problem . . . of maintaining this link so long at least as it does not provide sufficient revenue for its own maintenance . . . concerns the whole country and not only its western portion . . . This arrangement would reduce the expense of the railways by relieving them of a liability for which at present they have to recoup themselves by means of relatively high freight charges on through traffic passing over this bridge."

Other matters covered in the commission's report were primarily of local or special interest.



The plow on a single truck has its own turntable and may be turned by two men

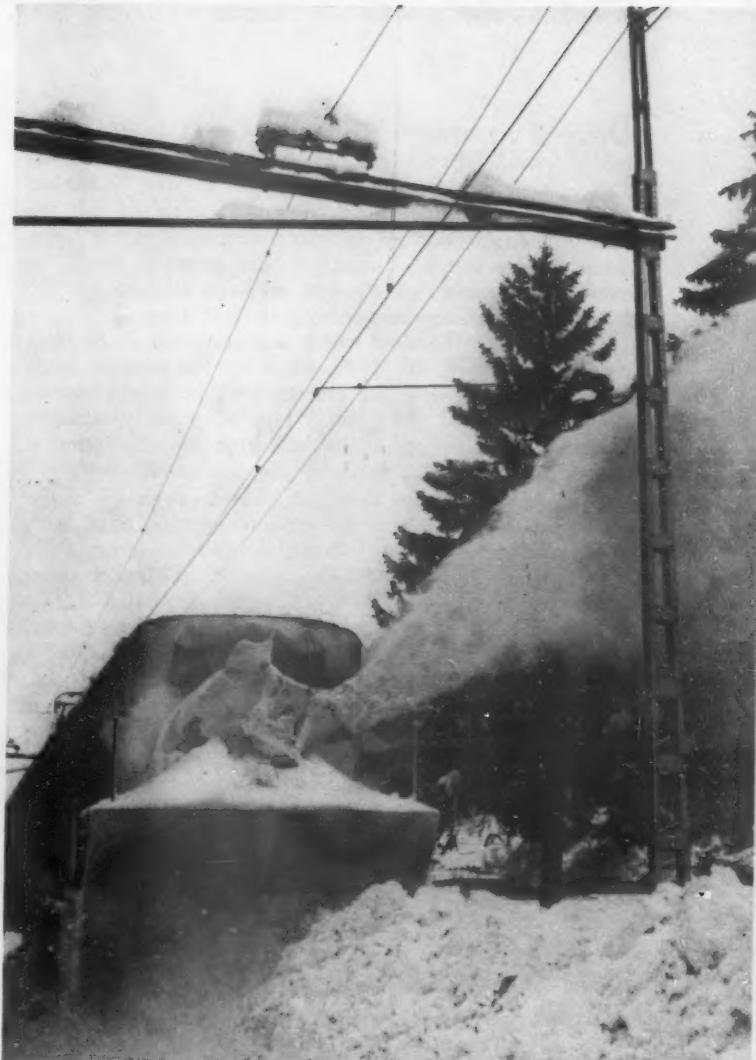
## Electric Snow Plows

Following several years of experimentation, the Swiss Federal Railways are now employing a type of electric snowplow which offers a number of advantages. The plow illustrated is pushed by an electric locomotive and the motors driving the rotors are supplied with power from taps on the locomotive transformer. In some cases, power is taken from the electric train heating circuit. In the latter case, the total amount of power is limited to about 400 kw.

The plow illustrated is mounted on a single truck, and the body may be rotated on the truck, eliminating the necessity of a turntable or wye.

Since the rotors are motor-driven, their diameter could be reduced, and instead of using a single big wheel, two small ones are arranged side by side. This has eliminated the dead corners inevitable with one large wheel, and has also reduced the amount of power required to push the plow.

The mechanism which picks up the snow may be raised or lowered to suit conditions of plowing. When desired, it can be lowered almost to the level of the rails. The snow may be thrown either to the left or right, and the speed of advance varies from one to six m.p.h., depending upon the depth of the snow.



The plow clears a width of 10 1/4 ft. and will throw snow a distance of 100 to 165 ft.

# DEFERRED MAINTENANCE REACHES \$950 MILLION



Railroads need to do more work of this kind, according to the I.C.C. Bureau of Valuation Study

Deferred maintenance in the amount of \$950 million had accumulated on Class I railroads as of December 31, 1950, according to the latest issue of the "Railroad Maintenance Study" which is made annually by the Engineering Section of the Interstate Commerce Commission's Bureau of Valuation. The previous study, issued in November, 1949, put at \$875 million the deferred maintenance accrued up to that time.

Like this predecessor, which was reviewed in *Railway Age* of November 26, 1949, page 41, the present study found all of the deferred maintenance in fixed-property items. It followed the general plan of previous studies, and it carried the usual disclaimer to the effect that it "has not been . . . passed on" by the commission.

The fixed-property items in which deferred maintenance was found, and the amount in each case, were shown in the study as follows: Superintendence, \$29,633,000; ties, \$301,047,000; rail, \$152,724,000; other track material, \$166,874,000; ballast, \$18,413,000; tracklaying and surfacing, \$348,724,000. These figures total \$1,017,415,000, but the bureau deducted \$61,200,000 to allow for surplus maintenance in equipment items, i.e., \$60,000,000 in maintenance of locomotives other than steam, and \$1,200,000 for superintendence. The net figure was \$956,215,000 and the bureau adopted the \$950 million as a round-figure estimate.

That the bureau is still not alarmed over the showing of these studies was indicated by inclusion in the present issue of the customary type of reassuring statement. "While the \$950 million may seem large," it said, "it is less than 30 per cent of the total maintenance expenditures for all accounts and about 65 per cent of all the maintenance of way and structures expenditures for a single year. Briefly, it reflects about 8 per cent deferred maintenance in the track accounts only and while not a satisfactory situation cannot yet be considered serious."

Explaining its failure to find any deferred main-

tenance of equipment, the bureau said that "deferred capital expenditures" should not be confused with deferred maintenance. It added: "While we appreciate that there is a shortage of freight-train cars which results in cars being kept in service beyond the economic service life, the fact that patchwork repairs only are being made to such cars does not indicate deferred maintenance. This type of deferred maintenance will eventually be taken care of through retirement when traffic declines or when new cars are available."

"Deferred maintenance," as used in the study was defined as "an estimate of the expenditures above normal that should be and probably will be made by the railroads in the near future for the necessary labor and materials to make good the present deficiencies in maintenance (repairs and replacements) that are below normal and to bring their status to a 50 per cent condition on the average. . . . This deficiency is an estimated future financial liability against the carrier. It does not represent the total accumulated cost of necessary repairs and replacements since there may be surplus maintenance elsewhere in the property. It is the excess of below-normal maintenance over surplus maintenance."

As to capital expenditures, the study distinguished between "deferred capital expenditures" (replacements protected by depreciation reserve) and "deferred capital improvements" (replacements involving betterments). The former were considered susceptible of "reasonably approximate" estimates. On that basis, the study found that "little, if any, deferred capital expenditure occur in fixed property accounts," but that capital expenditures for equipment may have been deferred in the amount of over \$750 million. It was emphasized, however, that there is an offset to this figure in the depreciation reserve, "since the over-age cars which are the cause of the deferred capital expenditures also cause the accumulation of an excessive reserve because of delayed retirements."

Estimates of "deferred capital improvements" were found generally to be "somewhat intangible and almost unlimited depending upon the individual railroad." However, exceptions were noted in the case of rail and track material, for which the study estimated that capital improvements in the way of heavier weight have been deferred in the amount of about \$50 million; and in the case of freight-train cars where "it would take \$150 million to replace the average type of car reflected in the 'deferred capital expenditures' estimate with the type of car that is currently purchased."

Other discussion in the study included explanations of its methods, which involved detailed chart studies on a dollar basis—except for the track accounts, where it had been found more expedient to use units of property. Adjustments were made to allow for the excess cost of overtime work, to convert to a "common dollar" of equal purchasing power, and to reflect the effect on maintenance costs of changes from the "normal" volume of traffic.

As in previous years, the bureau "considered," but rejected, railroad contentions that there should be some adjustment for the "inefficiency of labor" during World War II and the postwar period.

## New and Improved Products of the Manufacturers

### EDISON REMOTE CONTROL DICTATION SYSTEM

A remote control dictation system, capable of handling the dictation of up to 20 persons (small volume dictators) has just been announced by Thomas A. Edison, Inc., West Orange, N. J. The TeleVoice system, as it is called, consists of one to twenty modified telephones connected directly to a central recording instrument located near the secretary. The recording instrument, known as the TeleVoicewriter, records the dictation on plastic discs. Transcription of the dictated matter is accomplished with the standard Edison disc secretarial unit.

With TeleVoice the dictator performs only those functions that are a direct part of dictating. The secretary takes care of the changing of discs and index slips. Since the work is delivered to her by direct wire, her flow of work is even and messenger services are minimized.

Provision is made in the system for eliminating conflict between dictators who might wish to use it simultaneously. Because only dictators with a low volume of letter writing are put on the TeleVoice system, and because the average letter is very short, there is said to be little chance of finding the system "occupied." A positive warning signal in the form of a small red light on each phone goes on when the system is being used, making it unnecessary to pick up the receiver and listen to find out if all is clear.

Not only does the dictator avoid handling discs, but there is always a disc ready and waiting for him. A signal system, automatically and without the knowledge of the dictator, notifies the secretary when the disc is approaching the end. Then as soon as he hangs up she changes the disc. When a dictator goes "over" there is a triple warning system. The delay while the secretary changes discs is very short.

### CONTROL OF INSECT INFESTATION IN BOX CARS

Studies have revealed that the primary source of infestation of food products in box cars is from insects that harbor in accumulations of grain and other organic food materials which accumulate in inaccessible places behind the inner wood wall linings. A method of infestation control in box cars has been developed by Frank S. Bishop, Minneapolis, Minn., in collaboration with a milling company and a railroad. This system alleviates the infestation



A typical installation of TeleVoice stations for remote control dictation. The instrument provides the dictator the

controls needed for actual dictation, including start and stop, recording corrections, and listening back

by filling the voids behind the inner linings with Fiberglas blankets.

From three to six compartments are formed behind the end lining by the horizontal corrugations in the steel ends, the furring strips and the vertical tongue-and-groove lining boards. Grains or organic dust which get into these compartments through cracks or small breaks cannot be removed by any cleaning method. No means of eliminating the insect populations harbored and fed by these accumulations has been found.

Many box cars are built with the horizontal bottom board left out of the side lining of the car. This permits grain and other organic material which seeps into the space behind these linings to settle out onto the car floor by gravity. Even with these channels open, however, it is possible for accumulations of grain particles and dust to become caked in the side walls so that they cannot be broken up by hammering the inner lining.

In applying the Bishop system to the ends of a box car the inside surfaces of the steel ends and furring strips are first painted with an asphalt emulsion to protect these areas from moisture. Blankets of Fiberglas wool 2 in. thick, 24 in. wide and as long as the width of the car are then nailed to the furring strips to hold them in place until the lining compresses the wool firmly. Wood lining boards have been installed into all voids in the spaces behind the linings. A similar method is employed in applying the Fiberglas in the side walls of the car.

Installation of the Bishop system in the two ends of a car is said to require approximately one man-hour on the part of two carpenters, and about 180 sq. ft. of Fiberglas wool. The material and labor required to install the Fiberglas in the side walls of the car depend upon the size of the car.

Two tests have been conducted which illustrate the inability of insects to propagate in or to migrate through Fiberglas wool. In one, a layer of infested flour was placed in the bottom of a beaker and separated from a top



Installing the wood lining in the conventional manner after the Fiberglas blanket has been nailed in place in the end of a box car

layer of clean, uncontaminated flour by a compressed thickness of 2-in. Fiberglas wool. The insects did not penetrate the wool and the top layer of flour remained uncontaminated after the beaker had stood for months under conditions ideal for propagation.

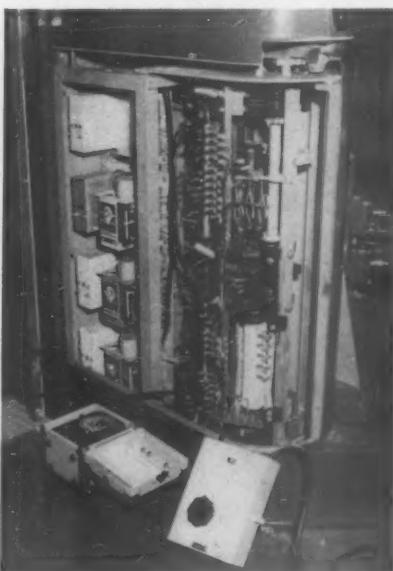
In the other test a trial installation of the Bishop system was made in the ends of a car in 1947. The side walls were left untreated. After approximately three years of service, during which time the car had traveled to all sections of the country, the end linings and bottom boards of the untreated sides were removed and the contents of the walls examined in the biological laboratory of a flour mill. The ends of the car, protected by the Bishop System, were found to be free of all forms of infestation. Large accumulations of grains and organic matter were found in the side walls. Analysis of this material showed that it contained many live insects which had propagated for several generations.

Information relative to this system of infestation control may be obtained from Department T, Owens-Corning Fiberglas Corporation, Toledo 1, Ohio.

#### TESTING EQUIPMENT FOR SPEED-SENSITIVE DEVICES

New equipment for testing speed-sensitive devices on American Locomotive-General Electric road locomotives has been announced by the General Electric Company. The equipment consists of a portable axle-generator drive unit and a portable tachometer-frequency indicator.

Designed to speed up locomotive



The portable tachometer-frequency indicator, (left foreground) and the portable axle-generator control (right foreground)

maintenance operations and to help insure proper operation of speed-sensitive devices, the test equipment aids in the accurate setting of automatic-transition relays and overspeed relays, and checks the accuracy of speedometers and the sequence of contactors and speed-sensitive relays.

One man can operate the equipment, and the control and meter can be placed next to the equipment being tested.

The portable axle-generator drive drives the locomotive axle generator at controlled speeds, by means of a 75-volt d.c. motor, a rheostat, a mounting and carrying frame, and leads which connect to the locomotive battery circuit. The mounting frame is designed for attaching the drive unit to generator Models 5GYA3A1, or 5GYA3A1. The drive unit is connected by removing the small end cover from the generator, removing the spline shaft connecting the generator to the axle, and inserting the spline of the drive unit. The unit weighs 60 lb. and is equipped with a carrying handle.

Besides its use with the automatic-transition type axle generator, the drive unit can also be used to drive the small axle-generator (Model 2CM4J7), which operates a speedometer only, when the locomotive is not equipped for automatic transition. In this case, the axle generator is removed from the journal box cover and mounted on the drive unit.

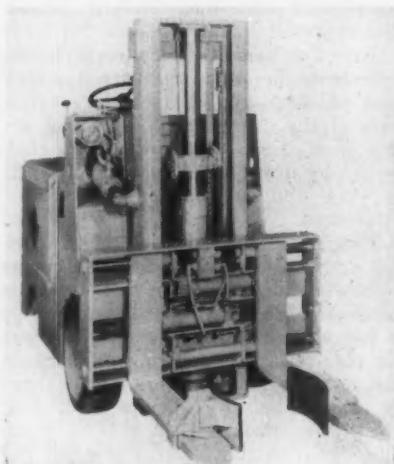
The portable tachometer-frequency indicator is an electric frequency meter which was developed especially for this test equipment. A cycles-per-second scale provides information for accurately setting the automatic-transition relays. The instrument is easily calibrated by means of a switch and calibrating screws, after plugging into a 60-cycle 115-volt outlet.

A dual-purpose instrument, the tachometer-frequency indicator also indicates engine speed by reading the output of the engine tachometers. The

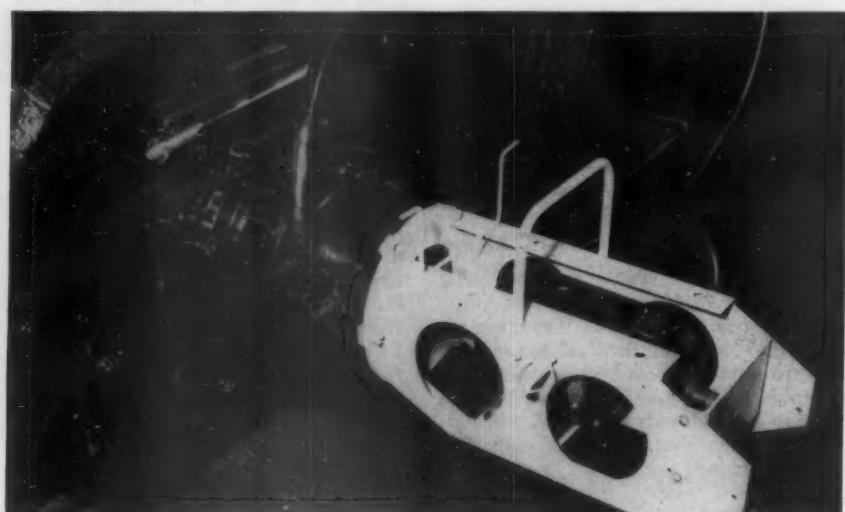
unit is adaptable for both old and new locomotives, with or without plug receptacles on the engine control panel.

#### BAKER OFFERS DRUM CLAMP

Rubber faced grab plates and horizontally adjustable forks are combined to make a clamp for handling cylindrical objects, the Industrial Truck Division of Baker-Raulang Company, Cleveland 2, Ohio, has just announced. Inside spacing of the forks is adjustable between 19 in. and 32 in., and the forks move simultaneously either in or out by means of separate hydraulic cylinders. Two shoes, which slip over and are pinned to standard pallet forks, hold the curved, rubber-faced grab



plates in place. A pressure reducer valve controls gripping pressure and the manufacturer states it can be adjusted so cardboard drums can be handled without crushing. An accumulator keeps hydraulic pressure constant for safety in moving the drums.



The portable axle-generator attached to the locomotive axle

# GENERAL NEWS

## Railroads See This Year's Gross Capital Expenditures at All-Time High

Returns submitted to I.C.C. bureau estimate total of \$1,376 million, as compared with 1949's \$1,312 million, the present peak; "Monthly Comment" also has figures showing that diesel-electrics last year performed more freight service than coal-burning steam locomotives

Estimates submitted by Class I railroads to the Interstate Commerce Commission's Bureau of Transport Economics and Statistics indicate that the carriers' gross capital expenditures of 1951 will be the largest on record—\$1,376 million as compared with 1949's \$1,312 million, the peak up to this time. The estimates were summarized by the bureau in the latest issue of its "Monthly Comment," which also pointed up the progress of dieselization with figures showing that diesel-electric locomotives in 1950 handled—"for the first time on an annual basis"—more freight service gross ton-miles than were handled by coal-burning steam locomotives.

The 1951 expenditure estimates were submitted by 124 of the 131 Class I line-haul roads; the seven roads (all in the Western district) which did not submit estimates made 1950 expenditures of \$44.8 million. The 131-road total for 1950 was \$1,066 million. Of the latter, the 124 roads making estimates for 1951 spent \$1,021 million, so their estimated 1951 outlays, totaling \$1,376 million, would be 34.8 per cent above the comparable 1950 total.

### Territorial Increases

By territories, estimated 1951 expenditures, and percentage increases above 1950, were as follows: Eastern district, \$516.3 million, 47.6 per cent; Pocahontas region, \$115 million, 46.9 per cent; Southern region, \$235.7 million, 47 per cent; Western district, \$509.4 million, 17.7 per cent. An accompanying table, reproduced from the "Comment," shows actual and estimated expenditures for the first six months of 1950 and 1951, respectively, separated between road and equipment.

Its figures on dieselization, as the bureau interpreted them, "clearly indicated" the "rapid growth in the use of diesel-electric motive power by Class I line-haul railways since 1946."

"In 1946," the "Comment" continued, "almost 70 per cent of the freight traffic . . . as measured in gross ton-miles . . . was handled by coal-burning steam locomotives as compared with about 43 per cent in

1950. In contrast the diesel proportion of the total rose from only 9.73 per cent in 1946 to 44.13 per cent in 1950, thus for the first time on an annual basis exceeding the proportion produced by the coal-burners. The proportion of freight traffic handled by oil-burning steam locomotives declined from 18.6 per cent to 11.36 per cent. The electric locomotive proportion also declined slightly."

As for the 1950 passenger service, as measured by passenger train car-miles, diesel-electric locomotives handled 57.3 per cent of the total, while coal-burning steam locomotives handled 22.72 per cent. The respective proportions in 1946 were 15.28 per cent and 52.05 per cent. Meanwhile, the oil-burning steam locomotive's share of the passenger service was cut in half—from 26.19 per cent of the 1946 total to 13.59 per cent in 1950.

In yard service, diesel-electrics performed 60.45 per cent of the 1950 locomotive hours, while coal-burning steam locomotives accounted for 32.4 per cent. The 1946 proportions were 29.46 per cent and 59.6 per cent, respectively. Oil-burning steam locomotives performed 5.8 per cent of the locomotive hours in yard service in 1950, as compared with 9.57 per cent in 1946.

An accompanying table, reproduced from the "Comment," shows for 37 large railroads (those with 1950 operating revenues above \$50 million) the proportion of their freight, passenger and yard operations which were handled by diesel-electric locomotives in 1950 as compared with 1946.

Another article presented data comparing the amount of money which Class I line-haul roads will need in 1951 to meet payments on principal of equipment obligations with charges to operating expenses for equipment depreciation in 1950. The 1951 payments due on equipment obligations were shown at \$248.9 million, which was equivalent to 83.7 per cent of the 1950 charges, totaling \$297.5 million, for equipment depreciation. As the bureau pointed out, the latter covered depreciation of power-plant machinery as well as rolling stock; but the power-plant-machinery total was "relatively small."

### Bureau's Interpretation

As the bureau interpreted them, the figures showed that "the Class I roads as a whole should be more than able to meet 1951 payments due on the principle of their equipments out of resources representing depreciation charges." However, the territorial figures showed that railroads in the Southern region were committed to 1951 payments which were 6 per cent in excess of the depreciation charges accrued in 1950, i.e., \$45.1 million as compared with \$42.5 million.

The article also included a table with similar data for 43 roads which reported payments due on equipment obligations in excess of \$1 million during 1951. The bureau's comment

## In the Week's News . . .

### HIGHLIGHTS

Passenger Loss Called "Economic Waste" . . . 51  
New York Passes More Truck Bills . . . . . 52  
February Gross Up 20.8% . . . . . 54  
P. O. Dep't. Wants Full Benefit of RR "Economies" . . . . . 56  
RRs Will Ask More in Ex Parte 175 . . . . . 56  
10,000-Car Steel Allocation to Be Restored in June . . . . . 58  
N. Y. S. & W. to Set Own Per Diem . . . . . 59

### DEPARTMENTS

Organizations . . . . . 62  
Supply Trade . . . . . 62  
Construction . . . . . 69  
Equipment & Supplies . . . . . 69  
Financial . . . . . 70  
Railway Officers . . . . . 72

**Actual and estimated gross capital expenditures of  
Class I steam railways, first six months of  
1950 and 1951**

Period	Number of roads	1950			Percentage distribution Equipment	
		Road	Equipment	Total	Road	Equipment
<b>Actual:</b>						
1st half 1950 .....	131	\$119,638,895	\$373,009,005	\$492,647,900	24.3	75.7
1st half 1950* .....	127	112,450,645	362,812,449	475,263,094	23.7	76.3
<b>Estimated:</b>						
1st quarter 1951 .....	127	73,760,549	248,161,478	321,922,027	22.9	77.1
2nd quarter 1951 .....	127	90,907,651	301,424,915	392,332,566	23.2	76.8
1st half 1951 .....	127	164,668,200	549,586,393	714,254,593	23.1	76.9
<b>Percent increase:</b>						
1st half 1951 vs. 1st half 1950 .....	127	46.4	51.5	50.3	..	..

\*Excludes figures for 4 roads which did not furnish 1951 estimates.

on those figures was the following:

"The returns of 22 of these roads indicate that their payments on equipment obligations will exceed the charges to operating expenses in 1950 for depreciation, . . . the percentages of excess ranging from 1.5 per cent for the Illinois Central to 94.2 per cent for the Clinchfield. As to the other 21 roads where payments due are less than depreciation charges, the range in the percentage relationship was from 26.2 per cent in the case of the Atchison, Topeka & Santa Fe to 99.3 per cent for the Missouri Pacific."

Meanwhile, the bureau had given first place in the "Comment" to a summary of the commission's March 12 report on the interim-relief phase of the Ex Parte 175 freight-rate case. As noted in *Railway Age* of March 19, that report authorized rate increases averaging about 2.4 per cent overall, as compared with 6 per cent sought by the railroads.

The bureau calculated that this new advance will raise to 61.1 per cent the cumulative percentage increase authorized since June 30, 1946. By territories, the cumulative increases will be these: Eastern district, 66.4

per cent; Pocahontas region, 57 per cent; Southern region, 61.2 per cent; Western district, 55.9 per cent.

These estimates, the bureau explained are "somewhat overstated." That is because they are "based upon the assumption that intrastate increases have and will follow the same pattern as the interstate, which has not been the case in certain instances"; and they make no allowance "for the numerous readjustments in rates, downwards in many cases, which have been made since the effective date of the last increase in 1949."

Also included in the "Comment" was the bureau's further analysis of the 1950 financial results for Class I roads. There it was noted that last year's ratio of income available for fixed charges to fixed charges was 2.94—"the highest for any year of record back through 1890." This coverage ratio was 2.14 in 1949. Dividend appropriations in 1950 totaled \$312 million as compared with \$252.3 million in 1949.

## Roads Reject Senator's Plan for B.R.T. Pact

**But would take some changes  
in agreement of December 21**

Regional carrier conference committees representing railroad management in pending wage and rules disputes with operating employees, on March 22, rejected with a counter-proposal a plan for settlement with the Brotherhood of Railroad Trainmen which was made by Senator Murray, of Montana. The Murray proposal is outlined below, and the carriers' counter-proposal said that management would take the wage-adjustment provisions, but not provisions which would eliminate Dr. John R. Steelman, assistant to President Truman, as the arbitrator on rules and demand the hose-coupling rule to individual properties.

The conference committees' statement, which explained the management's position in considerable detail, was made by D. P. Loomis, chairman of the Western Conference Committee, before the Senate committee on labor and public welfare. He was followed in the witness chair by President W. P. Kennedy of the B. R. T., who said he was "very much disappointed," because the Loomis statement indicated to him that the conference committees "do not want to settle," that they are "grasping every opportunity to prolong" the dispute. It is "a national disgrace," Mr. Kennedy added.

Senator Murray, a Democrat, is chairman of the Senate committee on labor and public welfare. He made his proposal shortly after the opening of a March 21 session of hearings in

**Percentages of freight, passenger and yard switching  
operations handled by diesel-electric locomotives\*—**

**Large line-haul railways, years 1950 and 1946**

Road	Freight services <sup>1</sup>		Passenger service <sup>2</sup>		Yard switching service <sup>3</sup>	
	1950	1946	1950	1946	1950	1946
<b>Eastern district and Pocahontas region</b>						
Pennsylvania .....	30.8	0.1	44.7	0.5	57.4	2.7
New York Central .....	26.6	1.4	33.4	6.7	43.7	28.0
Baltimore & Ohio .....	23.6	6.0	56.0	41.9	50.3	18.4
Chesapeake & Ohio .....	8.6	..	16.5	2.2	55.6	5.3
Norfolk & Western .....	..	..	1.4	..	..	..
Erie .....	63.4	11.9	89.4	..	82.3	9.1
N. Y. N. H. & H. .....	79.4	34.3	56.9	34.1	79.9	64.6
N. Y. C. & St. L. .....	0.7	..	93.9	..	46.8	12.0
Reading .....	51.7	21.3	27.3	10.5	67.6	39.7
Wabash .....	47.5	..	76.5	6.7	67.3	36.3
Boston & Maine .....	94.9	70.8	69.0	21.5	75.2	49.9
Del. Lack. & Western .....	84.9	24.8	65.9	0.2	69.0	50.0
Lehigh Valley .....	83.9	0.2	95.1	0.6	70.4	43.4
Grand Trunk Western .....	53.2	0.5	1.4	0.5	53.6	44.1
Delaware & Hudson .....	9.2	0.1	38.3	0.3	74.1	20.7
<b>Southern Region</b>						
Illinois Central .....	..	..	46.6	13.1	28.9	21.4
Southern .....	79.8	12.7	75.7	25.8	63.1	27.9
Louisville & Nashville .....	17.7	..	56.1	42.4	50.2	23.9
Seaboard Air Line .....	78.4	35.9	93.4	54.8	58.6	33.0
Atlantic Coast Line .....	62.7	25.1	92.7	52.4	50.3	36.4
Gulf, Mobile & Ohio .....	100.0	25.5	100.0	64.9	100.0	57.3
<b>Western District</b>						
A. T. & S. F. .....	60.3	34.4	82.2	19.2	77.4	48.2
Southern Pacific .....	53.1	..	24.7	1.5	49.1	36.8
Union Pacific .....	32.2	0.1	48.5	11.1	69.0	44.0
C. M. St. P. & P. .....	42.1	18.6	56.7	16.2	52.0	35.7
Chic. B. & Q. .....	66.8	29.8	93.1	52.8	71.8	60.0
Great Northern .....	44.4	29.8	84.7	24.2	71.0	46.6
Missouri Pacific .....	56.2	11.0	56.0	10.5	40.1	23.7
Chic. & North Western .....	62.4	5.1	49.7	20.9	62.0	44.2
Chic. R. I. & Pacific .....	57.4	22.1	74.6	31.4	69.7	52.1
Northern Pacific .....	40.2	11.3	80.6	1.4	44.8	43.0
Texas & New Orleans .....	29.7	..	52.1	..	76.9	21.6
St. L. - S. F. .....	81.1	..	67.3	..	85.3	41.6
M. K. T. Lines .....	80.9	0.2	49.9	..	46.7	4.0
Texas & Pacific .....	62.5	..	64.7	..	79.1	0.8
Denver & R. G. W. .....	75.7	32.3	82.6	18.5	74.5	64.8
St. L. S. W. Lines .....	52.8	36.2	31.8	..	84.5	68.3

\*Principal locomotive in train.

<sup>1</sup>Based on gross ton-miles of cars, contents and cabooses.

<sup>2</sup>Based on passenger train car-miles in locomotive propelled trains only.

<sup>3</sup>Based on yard switching locomotive hours in freight and passenger services.

connection with the committee's investigation of the failure to settle the "op" disputes. Chairman Loomis of the western conference committee was in the witness chair at the time, as he had been at the four previous hearing sessions.

The Murray proposal was a modification of the so-called "February 24 proposal," which was under consideration at mediation sessions begun that date under auspices of the National Mediation Board after the B.R.T. broke away from the other three operating brotherhoods to seek a separate settlement of its own case.

The original February 24 proposal would have modified the settlement basis embodied in the December 21, 1950, memorandum of agreement which was signed by the "op" leaders only to be rejected by the general chairmen of their unions. The proposed modifications were in the wage proposals.

The December 21 agreement provided for wage increases of 23 cents per hour for yardmen and five cents per hour for roadmen, retroactive to October 1. It further provided for an additional two cents per hour for yardmen and an additional five cents per hour for road men, effective January 1. Also there was an escalator clause calling for quarterly cost-of-living increases (beginning April 1)—the adjustments to add one cent per hour for each point of increase above 176 in the consumers' price index computed by the Bureau of Labor Statistics of the U. S. Department of Labor.

#### **Later Proposal Similar**

The original version of the February 24 proposal called for these same increases in the basic hourly rates, and additional ones of 2½ cents for roadmen and two cents for yardmen, effective March 1. The latter would be accompanied by a change in the escalator base from 176 to 178. Like the December 21 agreement, this February 24 proposal had provisions for settling rules along lines recommended by the emergency board which heard the case involving demands of the B.R.T. and Order of Railway Conductors.

These rules provisions included a stipulation that Dr. John R. Steelman, assistant to President Truman, would be arbitrator of any disputes which arose in connection with the writing of the rules agreements. This so-called Steelman provision was rewritten in the February 21 agreement to define Dr. Steelman's role more precisely. The B.R.T. has registered its objection to Dr. Steelman as the arbitrator.

Senator Murray's suggestion was that settlement be on the basis of the February 24 proposal, with two modifications. The first change would provide for a rules "referee" agreed upon by the parties in place of Dr. Steelman. The second would remand one of the rules—that involving pay for coupling and uncoupling of air hose—to the individual properties for settlement.

In confronting Mr. Loomis with the proposal, Senator Murray said he was informed that the B.R.T. was ready to



—From *Ties*, Southern Railway magazine

settle "immediately" on that basis. "I have studied the proposal and it seems to me to afford a fair basis for reaching an understanding," the senator also said. As he saw it, it "reduces the differences between the union and the carriers to two very small questions."

He then adjourned the hearing until the following morning, March 22, suggesting that Mr. Loomis return with the carriers' answer. Mr. Loomis had pointed out that proposals like that involved had been rejected by the carriers; but it seemed to Senator Murray, as he put it, that "you should make an effort" to reach an agreement on the basis of the proposal. Later, the senator expressed his hope that there would be a settlement with the B.R.T., and that it would set the pattern for a settlement with the other three "op" unions, which are still presenting their demands jointly.

The Loomis statement pointed up again the fact that management was willing to settle on the basis of the February 24 proposal, as advanced at that time, i.e., with no hose-coupling provisions and with rules arbitration provisions making Dr. Steelman or "his nominee" the arbitrator.

Explaining management's position on the hose-coupling rule, Mr. Loomis said the carriers wanted to negotiate a "reasonable" national rule, and he called the remand proposal "a subterfuge to preserve and extend this lucrative field of penalty payments."

The carriers rejected the Murray proposal's arbitration provision, Mr. Loomis said, because they felt that Dr. Steelman should stay in the picture because of his familiarity with the matter in question and the settlement dis-

cussion. Mr. Loomis pointed out that Dr. Steelman had participated in discussions at the White House leading up to the December 21 agreement. He added that "at no time has Mr. Kennedy told us that Dr. Steelman was not acceptable to him as the arbitrator nor do I understand that he testified before this committee that Dr. Steelman was not acceptable." Meanwhile, Mr. Loomis recognized that B.R.T. Vice-President W. E. B. Chase had told the committee that the brotherhood objected to Dr. Steelman.

In the course of his March 22 statement, Mr. Kennedy insisted that his own personal opposition to Dr. Steelman was registered by him during last month's meetings with N. M. B. on the February 24 proposal. It was one of the "big arguments," the B. R. T. president said. He also insisted, however, that the B. R. T. had no grudge against Dr. Steelman, but it does not consider him "qualified" or "competent" to handle the "complicated" rules involved.

Mr. Kennedy went on to say that he would like to have as arbitrator either of two former chairmen of N. M. B.—William M. Leiserson or Frank P. Douglass. Or Mr. Kennedy would agree to an arrangement whereby N. M. B. would designate as arbitrator one of a group of nominees agreed upon by the parties.

The case could be settled "this afternoon" so far as the B. R. T. was concerned, Mr. Kennedy also said.

## **Passenger Loss Called An "Economic Waste"**

**Dr. Edwards also says it drives away freight traffic**

Railroad passenger deficits "represent an economic waste of labor and capital," according to Ford K. Edwards, director of the National Coal Association's Bureau of Coal Economics, and formerly director of the Interstate Commerce Commission's Bureau of Accounts and Cost Finding. Dr. Edwards made this assertion in a March 17 address before the Fifth Rail Transportation Institute of the American University at Washington, D. C.

"Of still greater importance," he continued, "the deficits serve to drive traffic which would otherwise move by rail, because it is the fittest agency to handle it, to the less fit agencies; they magnify the overhead burden laid on low-grade, volume-moving commodities which cannot readily shift to other forms of transportation; and finally, they act to exclude many low-grade, volume-moving products from markets which they could otherwise hold. In the long run passenger out-of-pocket deficits can do major injury to the railroads themselves."

The task of eliminating passenger losses was identified by Dr. Edwards

as largely a "public relations job." He conceded that the job was one of "large proportions," but suggested that the carriers "should be able to profit from what appears to be a much more sympathetic atmosphere than has existed in the past."

Elaborating on the latter statement, Dr. Edwards mentioned the fact that the I.C.C. has been seeking an appropriation "to conduct a major study of the problem." He also referred to the passenger-deficit study being conducted by a committee of the National Association of Railroad and Utilities Commissioners.

Meanwhile, however, he had suggested that the deficit "seemingly is one of those things that must get worse before it gets better." That is because "the amount of sheer inertia and resistance to be overcome at every stop is appalling," Dr. Edwards added.

He went on to say that so long as freight rates are adjusted upward to absorb the deficits, "the all-important pressure on management to abandon, curtail, offer substitute service, or reprice its services, it not what it otherwise would be." To his knowledge the nation's economy has "no general counterpart" of this passenger-service situation, i.e., "one where an industry continues to take huge out-of-pocket losses, the burden of which it consciously places on the remaining users of its services."

Dr. Edwards' figures put the 1949 out-of-pocket loss from passenger-train services at \$488.2 million, while the whole passenger-service deficit of that year was shown at \$649.6 million. The former figure included \$186.8 million as the out-of-pocket loss in official territory; and Dr. Edwards calculated that bituminous coal's "share" of that \$186.8 million was \$38 million. He noted that the latter exceeded the \$35 million which he said was the "subsidy" portion of the \$61 million paid by the government to the air lines for carrying mail during the fiscal year ended June 30, 1950.

#### "Fantastic Situation"

Referring to the fact that losses on head-end traffic, which includes mail, account for much of the deficit, Dr. Edwards made this further comment: "To call upon coal (deeply immersed in its own competitive problems) to subsidize such out-of-pocket losses through freight rates when at the same time the U.S. air mail traffic is itself reaching out and carrying all the losses in the operation of domestic air line passenger service is, on the face of it, a fantastic situation."

Dr. Edwards also included in his paper a statement of I.C. Commissioner J. Haden Alldredge's views on the passenger service deficit. The statement showed that the commissioner still favors liquidation of the Railway Express Agency, thus leaving most of the express traffic to seek parcel-post service while the remainder would be handled by the railroads "through a reorganization and expansion of their baggage service."

#### Car Surpluses and Shortages

Average daily freight car surpluses and shortages for the week ended March 17 were announced by the Association of American Railroads on March 22 as follows:

	Surplus	Shortage
Plain Box	0	25,885
Auto Box	8	247
<b>Total Box</b>	<b>8</b>	<b>26,132</b>
Gondola	25	4,095
Hopper	448	652
Covered Hopper	0	72
Stock	750	33
Flat	0	1,456
Refrigerator	135	1,312
Other	256	45
	<b>1,622</b>	<b>33,797</b>

## New Rail Legislation Proposed in Canada

Government would implement parts of Royal Commission report

(Special to *Railway Age*)

Changes in the Canadian Railway Act to pave the way for equalization of freight rates across the dominion, action by the House of Commons Canadian National Railways committee to adjust the publicly owned road's capital structure, and provision in 1952-53 budget estimates to subsidize the railways for the northwestern Ontario "bridge" between East and West will be asked by the Canadian federal government at the present session of Parliament.

These moves are among the most important recommended by the Royal Commission on transportation in a report (summarized on page 42 of this issue), which was tabled in the House on March 15 by Prime Minister Louis St. Laurent, who then promised there would be legislation at this session to deal with some of the commission's recommendations. Another top item in the report, urging a unification of transport regulatory boards, is not believed to be so urgent, so the linking of the Board of Transport Commissioners, the Air Transport Board and the Canadian Maritime Commission will have to wait future action.

The federal government, however, has taken very seriously the commission's proposals for freight rate equalization, and in the latter part of this session legislation will be introduced to amend the "Traffic, Tolls and Tariffs" sections of the Railway Act so that the Transport Commission can establish and maintain freight rate uniformity. Strong and persistent protests from the railways against regional rates and equally strong demands from shippers for special consideration are said to have impressed the government with the urgency of an equalization move.

The Royal Commission in its report listed 12 steps by which headway could be made toward rate equalization, and then commented: "These items point to a new departure in class rates and commodity mileage rates and eventually in special or specific rates for Canada. It appears that Canada has reached a stage in its development when former methods of making regional rates must give way to a uniform rate structure that will treat all citizens, localities, districts and regions alike." It stated also that a start should be made with uniform equalized class and commodity scales.

The Canadian railways, according to the commission report, have agreed that within certain limits freight rate equalization is now desirable, and the commission stated in its report that the Transport Board has asked the railways to submit their proposals for equalization. This means that the regulatory body, the Board of Transport Commissioners, has already begun work on equalization.

Subsidizing uneconomic rail lines is not entirely new in Canada. The provisions of the Maritime Freight Rates Act are an example familiar to most taxpayers, so the reported proposal to adopt the commission's recommendation and help the railways finance the East-West "bridge" in northwestern Ontario is not an innovation, but it may later prove an invitation for requests to do the same in other regions.

Parliament will be asked to vote late this year or early in 1952 the sum of \$7,000,000 as the first annual aid to the Canadian Pacific and the Canadian National in maintaining uneconomic mileage in northwestern Ontario. This would mean the 500 miles between Sudbury and Fort William, on the C.P., and a similar mileage on the Canadian National between Capreol and Armstrong.

While this measure might directly ease the financial load on the railways for operating the uneconomic mileage it will, from the Royal Commission's viewpoint, have a more important bearing on the freight rate structure. "It is expected," the commission said in its report, "that the assistance provided will be particularly effective as a measure of relief in the case of charges on westbound traffic passing over this 'bridge.' The Crowsnest Pass rates structure provides to a considerable extent for requirements of eastbound traffic."

## New York Passes Additional Truck Bills

A change in the method of licensing trucks registered in New York state, which is estimated to yield approximately \$5.5 million in additional revenue to the state, was enacted by the New York State Legislature in the closing days of its 1951 session. The bill, which is a companion measure to the state's new graduated weight-distance tax on commercial trucks weighing more than 18,000 lb. gross (see page 68 of

last week's *Railway Age*), changes the truck registration base from 80 cents per hundred pounds of unloaded weight to 50 cents per hundred pounds of the maximum gross weight for which the truck is registered.

The state legislature also increased the diesel fuel tax from four cents to six cents per gallon and provided for some changes in administration of the tax to improve collections. The higher tax and administrative changes are expected to produce about \$500,000 per year in additional revenue.

In a third bill, the legislature authorized local communities to retain 50 per cent of any fines collected for violation of the state axle weight or gross weight laws and provided "stiff penalties" for violation of weight limits declared in gross registration certificates.

### Long Island Railroad Bills Passed in New York

Two bills designed to improve the financial position of the Long Island were enacted by the New York state legislature just prior to adjournment of its 1951 session.

One of the bills provides for what is said to be a "novel type" of railroad redevelopment corporation and is intended to make possible continued operation of the L. I. under private ownership. The second bill is an alternative measure, which would create a state transit authority to take over the road in the event private interests should be unable or unwilling to continue its operation. The second bill is generally in line with recommendations for such an authority made by the special Long Island Rail Road Commission (see *Railway Age* of January 29, page 36).

The redevelopment corporation bill, which has been approved by William H. Draper, Jr., trustee of the L. I., provides for cancellation of state claims for franchise taxes and grade crossing eliminations totaling from \$10 million to \$13 million; for similar cancellation of from \$8 million to \$10 million in local taxes; a future limit of 40 per cent of real estate taxes now levied; exemption from future state taxes, and limited authority for the corporation to establish its own intrastate fares. Any reorganization plan for the railroad would be subject to approval by New York state, New York city and Nassau or Suffolk county.

### Ohio Valley Board Protests Car Steel Allotment Cut

In a resolution passed at its March 14 meeting at Columbus, Ohio, the Ohio Valley Transportation Advisory Board "deplored" the "serious curtailment of the essential program for producing 10,000 freight cars a month" and directed that its secretary so advise the National Production Administration, the Defense Production Administration and every U.S. senator

and representative from the Ohio Valley territory. The board termed the recent N.P.A. steel allocation cut from 310,000 tons — or the equivalent of 10,000 freight cars — to 288,500 tons a month, which will permit production of only 9,000 cars monthly from May to July, a "most serious threat to our national rail transportation." It urged that senators and congressmen from its area "do everything within their power to restore steel and other material allocations to the level necessary to permit production of at least 10,000 new freight cars monthly for protection of our nation's military and economic security."

### Col. Henry's Remarks

Commenting on the resolution, Col. Robert S. Henry, vice-president-public relations of the Association of American Railroads, and principal speaker at the luncheon session, said that in dealing with those who are faced with the difficult task of apportioning scarce materials, one must be both patient and understanding. He stressed, however, that with the need for more steel and other strategic materials clearly indicated, the nation would not be in position to produce these needs without adequate rail transportation. "Rail transport is essential to production," he said, "and the two must go up together."

Pinch-hitting for Defense Transportation Administrator James K. Knudson, who was unable to fulfill his previously announced speaking engagement at the board's meeting, Col. Henry

traced the nation's knowledge of the use of freight cars from the Civil War to the present. The Civil War taught us "the hard way," he said, that railroad service must be kept fluid and that cars must be loaded and unloaded promptly lest the supply line become choked and useless. "We had to learn that all over again in World War I," he continued, "but the knowledge stuck with us for World War II and was clearly reflected in the performance of the railroads during that conflict."

Because the average general-purpose railroad freight car is in the hands of shippers and consignees almost as much as it is in the hands of the railroads, the vigilance of shippers boards should be credited with much of the recent improvement in freight car utilization, Col. Henry said.

"Thanks to the willing cooperation of the shipper," he continued, "we have — to my surprise — exceeded the ton-miles per car per day peak of World War II. In October 1943 we reached the figure of 1,024 ton-miles per car per day. With the impact of the Korean conflict, the October 1950 figure rose to 1,127 ton-miles per car per day. But we have not reached the point where we may sit back and rest on our laurels."

Throughout his talk, Col. Henry emphasized the factors behind the present car shortage which were beyond the railroad's control and, in some cases, beyond their ability to foresee. The full benefit of their freight car building program remains to be felt, he said. "The achievement of the goal of 10-



WHEN GEORGE A. KINGSLEY, 94, met Col. Robert S. Macfarlane, president of the Northern Pacific, in the latter's business car in Portland, Ore., a few weeks ago, he brought up to date his unique record of having known every N.P. president since Henry Villard, who headed the company in 1883 when the transcontinental line was first completed. Mr. Kingsley told Col. Macfarlane that he had retired in 1925 after 48 years in N.P. service. That was nine years before Col. Macfarlane began his railroad career!

000 new cars per month will go a long way toward enabling the railroads to offer you better service."

A total of 178 shippers and railroad men attended the meeting, which was the board's 97th. The next meeting was announced for June 19-20 at the Hotel Lincoln, Indianapolis, Ind.

### New Auto Rates Again Postponed By I.C.C.

The Interstate Commerce Commission has further postponed, from April 21 to July 2, the effective date of its outstanding order requiring an adjustment of railroad freight rates on new automobiles.

The commission had previously postponed the effective date from February 20 until April 21 after railroads in the various territories filed petitions for reconsideration of the decision involved. The I.C.C. has not as yet acted on those petitions.

That decision, reviewed in *Railway Age* of November 25, 1950, page 52, would have the effect of narrowing the spread between the rate basis applicable on shipments from factories in Detroit, Mich., South Bend, Ind., Toledo, Ohio, and Kenosha, Wis., and that applicable on shipments from the regional assembly plants of General Motors Corporation and the Ford Motor Car Company. The case is docketed as No. 29820.

### February Gross Revenue 20.8% Above Last Year

From preliminary reports of 82 Class I railroads, representing 81.5 per cent of total operating revenues, the Association of American Railroads has estimated that February gross amounted to \$575,793,198, an increase of 20.8 per cent above the \$476,732,005 reported for the same 1950 month. Estimated February freight revenue was \$483,823,354, as compared with February 1950's \$392,749,143, an increase of 23.2 per cent. Estimated passenger revenue was \$50,382,289, as compared with \$47,136,607, an increase of 6.9 per cent. All other revenue was up 12.9 per cent — \$41,587,555 as compared with \$36,846,255.

### Lower Great Lakes Ports Thawed by March 20

Due to mild weather conditions, the 1951 navigation season on the Great Lakes may be considerably longer than average. Although the Lake Superior ports of Duluth, Minn., and Superior, Wis., are still ice-locked, navigation to most of the lower lake ports was possible on March 21, considerably earlier than the average opening date — April 15. It is expected that the locks at Sault Ste. Marie will be sufficiently free of ice to permit passage of vessels by April 1.

Because of this unusually early start of the shipping season, the record high volume of ore tonnage handled in 1942

(92 million tons) may be approached during 1951. Last year, with ice conditions which delayed shipping almost through the month of May, some 78 million tons were handled.

The capacity of the lakes ore fleet this year remains substantially the same as last as none of the dozen new ore vessels on order will be afloat and outfitted before the close of the season. With Congressional approval, which is anticipated, some 43 Canadian vessels will again supplement the domestic fleet in service between American ports. It is expected that a good portion of both fleets will devote much of the early part of the season to movement of grain currently in storage at Lake Superior points.

### Transport Advisory Group Established by Wilson

A Defense Transportation and Storage Committee to coordinate land, sea and air transport and use of storage facilities for national defense has been established by Director Charles E. Wilson of the Office of Defense Mobilization. Delos W. Rentzel, who has since been nominated to be Under Secretary of Commerce for Transportation, was designated as chairman of the group.

The committee was established pursuant to Defense Mobilization Order No. 7.

Its purpose will be to advise the mobilization director on problems relating to defense transportation and storage, to review federal policies, plans and problems of transport and storage, and to review for the director proposed legislation, executive orders and administrative orders and regulations in this field.

In addition to Mr. Rentzel, the advisory group will consist of representatives from the Departments of State, Treasury, Defense, Interior, Commerce, and Agriculture, the Defense Production Administration, and the Defense Transport Administration, and such other members as Director Wilson may designate.

### Minchin Heads D.T.A. Rail Division; Others Named

G. H. Minchin, senior vice-president of the Atchison, Topeka & Santa Fe, has been appointed director of the Defense Transport Administration's Railroad Division. He will devote his full time to the directorship, having obtained a leave of absence from the Santa Fe.

Others who have recently joined D.T.A.'s railroad staff are A. L. Christiansen and F. J. Orner. They will serve as consultants on railroad matters.

The services of Mr. Christiansen, who is superintendent of transportation of the Elgin, Joliet & Eastern, have been made available for a period of six months, the D.T.A. announcement said. It added that Mr. Christiansen "has been detailed to the Bureau of

Service of the I.C.C. as acting chief of its Open Car Section, where his experience will be utilized in connection with the distribution of open car equipment for the handling of coal, iron ore, and other materials requiring this class of railroad equipment."

Mr. Orner is on leave of absence



G. H. Minchin

from his position of superintendent of freight transportation of the New York, New Haven & Hartford. The D.T.A. announcement said he will serve on a full-time basis in the Railroad Division, specializing on "matters pertaining to freight car supply and utilization."

### I.C.C. Schedules Regional Hearings in Ex Parte 177

Regional hearings in Ex Parte No. 177—the rate-increase proposal of the Railway Express Agency—have been scheduled by the Interstate Commerce Commission. The hearings will be held before Examiner Samuel R. Diamondson at Jacksonville, Fla., on April 23; Dallas, Tex., on May 1; San Francisco, Cal., on May 8, and Chicago on May 16.

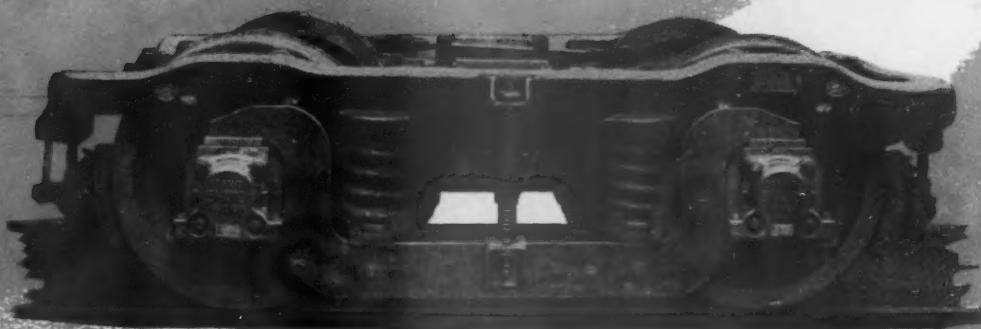
The R.E.A. proposal is for an upward revision in its rates and charges, including an increase in first-class rates of 57 cents per 100 pounds, and establishment of a \$2 minimum on all shipments. (See *Railway Age* of January 22, page 35.) Hearings on the proposal will open March 29 in Washington, D. C., before Examiner Diamondson.

### Freight Car Loadings

Loadings of revenue freight in the week ended March 17 totaled 745,365 cars, the Association of American Railroads announced on March 22. This was a decrease of 4,262 cars, or 0.6 per cent, compared with the previous week; an increase of 19,831 cars, or 2.7 per cent, compared with the corresponding week last year; and an increase of 137,443 cars, or 22.6 per cent, compared with the equivalent 1949 week.

Loadings of revenue freight for the week ended March 10 totaled 749,627

*It's New!*



Arranged with clasp brakes and roller bearings

## COMMONWEALTH BOX-EXPRESS CAR TRUCK

**Provides Smooth Riding  
Protects Car Contents  
Reduces Damage Claims**

**E**specially designed to meet the demand for a practical, rugged light-weight truck for Box-Express Cars operating in passenger train service, this newest type COMMONWEALTH Equalized Swing-Motion Truck provides a smoother riding car, protects car contents, and greatly reduces upkeep costs.

The swing bolster arrangement permits effective lateral control, assuring smoother riding with less shock and damage to car contents, car body and track structure.

The one-piece cast steel truck frame has integral pedestals, machined to maintain the axles in tram at all times, which is essential whether plain or roller bearings are used.

COMMONWEALTH BX Trucks are arranged for either clasp or single shoe type brakes.

For dependability and real economy, it will pay you to apply COMMONWEALTH BX Trucks to your express, refrigerator and merchandise cars in passenger train service.

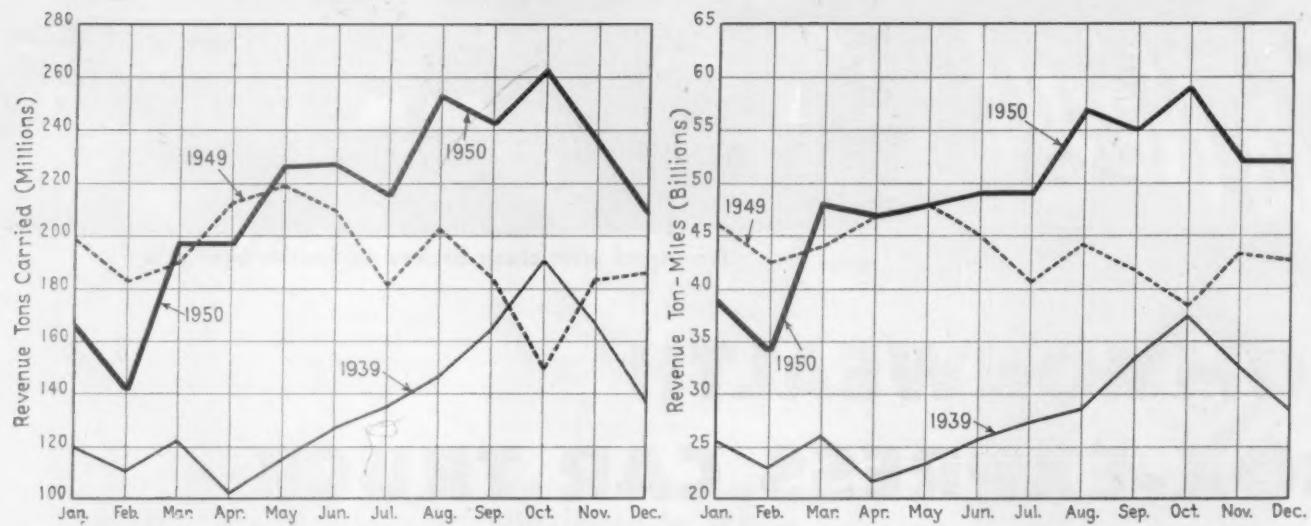


Pennsylvania Railroad 60-foot Long  
Box-Express Car with Commonwealth BX Trucks



### GENERAL STEEL CASTINGS

GRANITE CITY, ILL. • EDDYSTONE, PA.



REVENUE TONS AND REVENUE TON-MILES—1950 compared with 1939 and 1949

cars; the summary for that week, as compiled by the Car Service Division, A.A.R., follows:

REVENUE FREIGHT CAR LOADINGS For the week ended Saturday, March 10			
District	1951	1950	1949
Eastern	138,462	130,834	131,551
Allegheny	161,756	145,838	152,333
Pocahontas	59,858	65,338	56,244
Southern	132,533	128,702	124,016
Northwestern	77,084	69,424	77,698
Central Western	117,552	108,774	110,496
Southwestern	62,382	59,001	56,988
Total Western Districts	257,018	237,199	245,182
Total All Roads	749,627	707,911	709,326
Commodities:			
Grain and grain products	50,775	39,910	48,717
Livestock	7,205	7,295	9,038
Coal	133,442	191,978	139,081
Coke	16,462	9,270	15,453
Forest products	43,482	36,740	37,863
Ore	20,075	9,127	14,455
Merchandise I.C.L.	86,556	84,282	96,749
Miscellaneous	391,630	329,309	347,970
March 10	749,627	707,911	709,326
March 3	785,867	574,449	705,552
February 24	734,794	546,707	688,128
February 17	740,557	560,068	697,335
February 10	573,163	568,816	699,442
Cumulative total 10 weeks	7,244,602	5,960,808	7,026,437

**In Canada.**—Carloadings for the week ended March 10 totaled 74,882 cars, compared with 75,660 cars for the previous week, and 71,189 cars for the corresponding week last year, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
March 10, 1951	74,882	39,525
March 11, 1950	71,189	29,448
Cumulative totals for Canada:		
March 10, 1951	738,492	358,765
March 11, 1950	671,514	281,222

## Railroads Will Ask More In Ex Parte 175 Rate Case

Railroad traffic officers were meeting in Chicago on March 22, as this issue went to press, for the purpose of modifying the carriers' freight-rate petition which is pending before the Interstate Commerce Commission in the Ex Parte 175 proceeding. The petition now seeks a 6 per cent increase, and the modi-

fications under consideration would raise that by an amount sufficient to offset the 12½ cents per hour wage increase awarded recently to non-operating employees.

As reported in *Railway Age* of March 19, page 69, the commission has already authorized in Ex Parte 175 increases averaging about 2.4 per cent, which will remain in effect as a measure of interim relief until the commission passes on the permanent proposal. The interim increases will become effective April 4, one day later than the April 3 date which was the original "target," as noted in last week's issue. The commission's report authorized establishment of the higher rates on 15-days notice, and the necessary tariffs were filed on March 19.

## D. & H. Flat Car

Each of the four trucks under D. & H. flat car 16153 (not 16135), described in the March 19 *Railway Age*, has four wheels, not eight, as mentioned on page 45 of that article.

## Mail Pay Case Discussed At Congressional Hearing

The Post Office Department has told Congress that it proposes to settle the pending mail pay case with the railroads on the basis of an average 38 per cent increase in rates, including the 25 per cent already in effect. This would be less favorable to the railroads than what they received in the retroactive settlement last December, when they were awarded 48 per cent, including a 25 per cent interim increase.

Explaining its 38 per cent proposal, the department said future rates—i.e., those in effect after January 1, 1951—should give effect to "savings. . . from mechanization of terminals, use of containers and other efficiencies. . . dieselization, centralized traffic control and other technological improvements. . . (and) elimination of the round-trip provisions as they apply to storage mail."

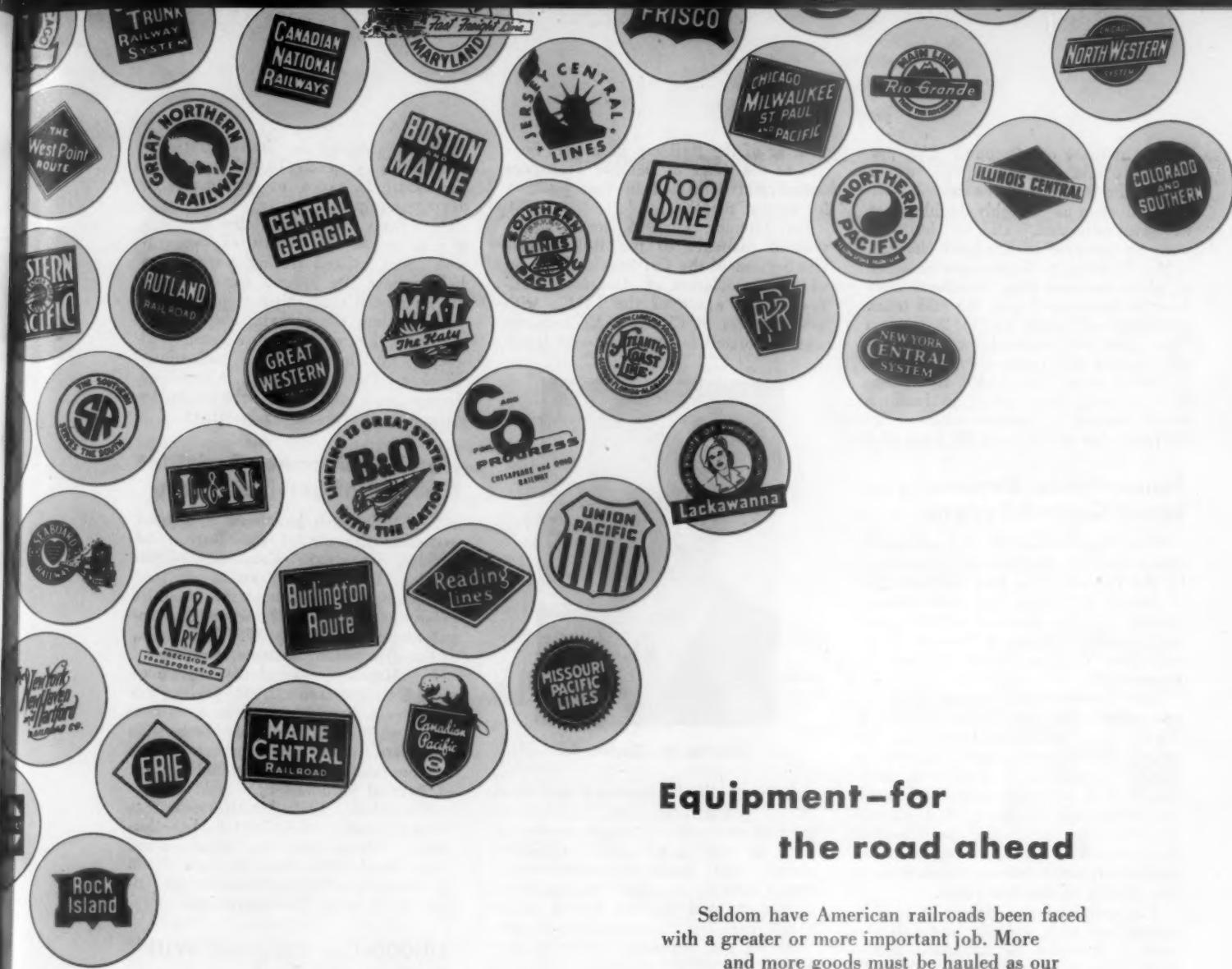
The department expressed its views on the mail pay case during House Appropriations subcommittee hearings on the department's budget for fiscal 1952. Postal representatives appearing before the subcommittee included Postmaster General Donaldson, J. M. Redding, assistant postmaster general in charge of transportation, and A. C. Wiprud, associate solicitor who has handled the mail pay case for the department.

"Our contention is that there has been no increase (in railroad costs since 1948), even though unit prices of materials, labor, and supplies have increased," Mr. Wiprud told the subcommittee. It was his contention that savings from dieselization and other efficiency measures had more than offset the price increases. "Our case has gone in on that basis," Mr. Wiprud added.

The case to which Mr. Wiprud referred is that which began February 18, 1947, when the railroads first asked the Interstate Commerce Commission for an increase in mail-pay rates. Subsequent petitions amended the original request until the roads were asking for a 95 per cent increase over the 1947 rates. The commission approved a 25 per cent interim increase, and on December 4, 1950, approved an agreement between the department and the roads which provided for settling the case up through December 31, 1950, on the basis of the 48 per cent increase noted above. The future-rates phase of the case is still pending.

In discussing the retroactive settlement, Mr. Donaldson said he believed it to be "very excellent," and "far better than we would have gotten, had we let the case go to the I.C.C. for final rate fixing." He told the subcommittee that a supplemental request for funds was being submitted to obtain the \$152 millions due the railroads as a result of this settlement.

As to the rates for the future, Mr. Redding, the department's transportation chief, said the railroads have submitted rates to the I.C.C. which amount



## Equipment-for the road ahead

Seldom have American railroads been faced with a greater or more important job. More and more goods must be hauled as our civilian economy and military program expand.

Larger fleets will be necessary. Obsolete and worn out equipment must be replaced.

Pressed Steel Car Company manufactures standard and custom built box cars, refrigerator cars, gondola and hopper cars famous for efficient performance on every major road in America.

We suggest you bring your requirements to us and make sure you are equipped and prepared for the road ahead.



### PRESSED STEEL CAR COMPANY, Inc.

6 No. Michigan Ave.  
Chicago, Ill.



Mount Vernon, Ill.  
Plant



to an increase of "around 140 percent." He said they have gone "whole hog on the thing," have estimated their terminal costs as "roughly double what we have estimated," and, in addition, want an increase in line-haul charges.

Mr. Redding told the subcommittee of plans for switching shorthaul mail from railroads to trucks. He said truck operation on hauls up to 200 miles from principal terminals will cut terminal costs and speed up mail service in many cases. He added that steps have already been taken to institute truck service in several cities. (See *Railway Age* of February 26, page 44.)

### Pennsylvania Demonstrates Speed Control System

First installation of the automatic speed control system recently announced by the Pennsylvania (see *Railway Age* of March 12, page 93) was demonstrated to representatives of the press and to public officials at Newark, N. J., and New York on March 21 and 22, respectively.

The demonstration, arranged in cooperation with the Union Switch & Signal Co., which is furnishing the speed control equipment, included a special baggage car outfitted with working models and full-scale equipment, and a locomotive (class GG-1 electric No. 4907), on which the speed control apparatus has already been installed and which made demonstration runs in the vicinity of the two cities.

The speed control system is used in connection with wayside and cab signals. It provides for automatic reduction of train speeds to 45, 30 or 15 m.p.h., depending on signal aspects. The first phase of the railroad's program calls for equipping 307 locomotives as rapidly as materials can be obtained; when this phase is completed more than two-thirds of the Pennsylvania's passenger train service will be operated under automatic speed control.

### New Service Bureau Chief Began Career in 1919

Charles W. Taylor, Jr., whose appointment as director of the Bureau of Service of the Interstate Commerce Commission, was reported in *Railway Age* of March 5, began his railroad career in 1919 as a roadmaster's clerk on the Houston & Texas Central (now the Southern Pacific) at Austin, Tex., later becoming material-stores accountant. In 1920 he transferred to the Atchison, Topeka & Santa Fe as clerk in the superintendent's office at Temple, Tex., and rose to the positions of assistant division accountant, division accountant and chief clerk to superintendent.

In 1940 he became chief clerk to the general superintendent of transportation of the Santa Fe at Chicago, and was later promoted to assistant to general superintendent of transportation in the same office. He came to Washington, D. C., early in 1943 as assistant

director of the Railway Transport Section of the Office of Defense Transportation, and remained in that position for several months.

On January 1, 1944, he was appointed manager of the Refrigerator Car Section of the Car Service Division of the Association of American Railroads, and agent of the I.C.C., with headquarters in Chicago. As such, he was authorized to supervise, coordinate



Charles W. Taylor, Jr.

and direct distribution and movement of all refrigerator cars, without regard to ownership, throughout the nation; to require any road to deliver, accept, and transport empty refrigerator cars to equalize the supply of such cars; and to limit use of refrigerator cars for transportation of commodities not requiring protective service

### U.P. Extends "City of St. Louis"

The Union Pacific streamliner, "City of St. Louis," which has linked St. Louis, Mo., and Denver, Colo., since June 1946, will get a new transcontinental assignment April 29. It will operate as a through train between St. Louis and Los Angeles, Cal., serving Kansas City, Mo., Denver, Salt Lake City, Utah, and Las Vegas, Nev. According to an announcement by C. J. Collins, general passenger traffic manager, the train will include through coaches and sleepers for San Francisco, Cal., and Seattle, Wash.

### Pratt Asks Doubling of Car Steel Allocations

If a railroad transportation crisis is to be avoided, the government must double allocations of steel and other materials to freight car building, and encourage maximum production of new freight equipment, H. H. Pratt, general traffic manager of the Crucible Steel Company of America and former president of the Atlantic States Shippers Advisory Board, told the Mid-Hudson Traffic Club at Poughkeepsie, N. Y., on March 15. Mr. Pratt, who spoke on

"Industry's Stake in Transportation," said industry needs 10,000 new cars per month in excess of retirements of overage equipment.

Mr. Pratt further said that industry should revive the "spirit of cooperation" that existed during the war to help relieve the present car shortage. He suggested that shippers use to the fullest extent the carrying capacity of all cars, by weight or volume, and speed up loading and unloading. Weekend delays, he added, in handling freight cars and poor scheduling by railroads aggravate the shortage.

### Harrison Becomes Assistant Director of Service Bureau

C. L. Harrison has been appointed assistant director of the Bureau of Service, Interstate Commerce Commission. He had been acting director of the bureau for about five months prior to February 27, when the appointment of Charles W. Taylor, Jr., to the directorship became effective.

Mr. Harrison entered the service of the I.C.C. in October, 1941, joining the Bureau of Service's staff as a service agent. He had previously been with the Seaboard Air Line, serving in various operating positions, including that of general yardmaster.

Since June, 1943, Mr. Harrison has been assistant to the director of the bureau. Meanwhile, he also served from April, 1947, through June, 1949, as executive officer of the former Office of Defense Transportation.

### 10,000-Car Program Will Be Restored for June

Steel allocations sufficient to restore the freight car program to 10,000 cars per month are expected to be made for June. This was learned last week as the National Production Authority completed work on the Defense Transport Administration's latest request for steel for freight cars.

The June steel allocation is also expected to provide for 500 tank cars, above the 10,000 general purpose freight cars. D.T.A. had requested extra steel for 850 tank cars, and there were optimistic views that N.P.A. would allocate enough for at least 500.

N.P.A. action in restoring the 10,000-car program, which was previously cut to 9,000 for May, followed adverse reactions in Congress and elsewhere. Senators Thye, Republican of Minnesota, and Carlson, Republican of Kansas, were among those who had criticized the cut-back.

Senator Thye, in a March 12 speech in the Senate, revealed that he had written Director Charles E. Wilson of the Office of Defense Mobilization, urging him to re-establish the 10,000-car freight car program.

"While distribution, allocation, and maximum use of available cars is an immediate problem, the crux of the matter is the fact that there is a nationwide shortage of cars," Senator Thye

wrote. "It is particularly disturbing," he continued, "that the National Production Authority has announced a cut-back in the allocation of steel for boxcars, effective with the month of May. Instead of a cut-back, there should rather be a step-up in production . . ."

The following day, March 13, Senator Carlson again brought the subject of freight cars to the attention of the Senate. Discussing the "very critical situation" in regard to cars, the Senator told of a meeting held March 10 at Topeka, Kans., at which representatives from several midwestern states met to form the Grain States Compact Commission on Transportation.

In addition to the state representatives, others were present from the Interstate Commerce Commission, Defense Production Administration and the Association of American Railroads, Senator Carlson said.

At this first meeting it was decided to make suggestions to a number of government agencies with respect to the freight car problem. According to the senator, these suggestions included one directed to the D.P.A., asking that it restore promptly "sufficient allocations of steel to build at least 12,500 new boxcars a month."

Meanwhile, in asking that June allocations be for 10,000 cars, the D.T.A. said allocations made in January are expected shortly to be coming out of the car-builders' shops in the form of freight cars at the 10,000-monthly rate. N.P.A. allocated steel at the 10,000-car rate for the first four months of 1951.

As to its request for steel for tank cars, D.T.A. said the "critical shortage" and the "greatly increased demands" resulting from the mobilization program made the separate request necessary.

### Susquehanna to Set Own Per Diem Rates on Cars

The New York, Susquehanna & Western has notified the Association of American Railroads that it has established its own per diem car charges, based on the date cars were built or rebuilt, effective after 12:01 a.m., April 1. According to Henry K. Norton, trustee, the Susquehanna intends to settle its per diem accounts for all per diem cars used by the road at the following rates: Cars placed in service before January 1, 1945—\$1.20; cars placed in service on or after January 1, 1945, and before July 1, 1951—\$1.75; cars rebuilt since February 1, 1945, at an expense of not less than \$1,700 for material and labor (excluding shop overhead, supervision costs and other charges)—\$1.75; and cars placed in service on or after July 1, 1951—\$2.

In his notifying letter to A.A.R. President William T. Faricy, Mr. Norton said:

"Ever since the freight car per diem rate was increased in greater proportion than the average increase in freight rates, the problem of car hire has been aggravated for terminal roads. This problem has been particularly acute on the Susquehanna, whose line haul on the great bulk

### Selected Income and Balance-Sheet Items of Class I Steam Railways in the United States

Compiled from 127 reports (Form IBS) representing 131 steam railways

(SWITCHING AND TERMINAL COMPANIES NOT INCLUDED)

Income Items	United States			
	For the month of November 1950	1949	For the eleven months of 1950	1949
1. Net railway operating income.....	\$110,000,601	\$75,378,130	\$924,677,406	\$616,138,042
2. Other income.....	18,684,744	21,747,526	206,199,031	193,436,512
3. Total income.....	128,685,345	97,125,656	1,130,876,437	809,568,554
4. Miscellaneous deductions from income.....	3,573,214	3,818,574	42,155,303	33,555,246
5. Income available for fixed charges.....	125,112,131	93,307,082	1,068,721,134	776,013,308
6. Fixed charges:				
6-01. Rent for leased roads and equipment.....	10,557,170	10,570,991	113,614,324	111,117,057
6-02. Interest deductions <sup>1</sup> .....	25,008,658	24,975,376	275,639,572	272,900,245
6-03. Other deductions.....	254,015	228,683	2,477,179	2,304,905
6-04. Total fixed charges.....	35,819,843	35,775,050	391,731,075	386,322,207
7. Income after fixed charges.....	89,292,288	57,532,032	696,990,059	389,691,101
8. Other Deductions.....	3,145,871	3,318,190	35,511,206	35,145,119
9. Net income.....	86,146,417	54,213,842	661,478,853	354,545,982
10. Depreciation (Way and structures and Equipment).....	36,489,686	35,130,793	392,704,623	373,128,886
11. Amortization of defense projects.....	1,128,108	1,367,669	14,743,498	15,048,574
12. Federal income taxes.....	68,544,893	30,660,515	497,320,838	230,125,829
13. Dividend appropriations:				
13-01. On common stock.....	73,180,993	36,223,051	210,350,804	169,813,108
13-02. On preferred stock.....	12,814,806	5,245,742	71,684,849	55,292,824
Ratio of income to fixed charges (Item 5 ÷ 6-04).....	3.49	2.61	2.78	2.01

Selected Expenditure and Asset Items	United States	
	Balance at end of November 1950	1949
17. Expenditures (gross) for additions and betterments—Road.....	\$248,874,241	\$294,934,964
18. Expenditures (gross) for additions and betterments—Equipment.....	719,437,020	908,771,796
19. Investments in stocks, bonds, etc., other than those of affiliated companies (Total, Account 707).....	472,868,205	504,019,681
20. Other unadjusted debits.....	107,913,159	121,814,888
21. Cash.....	1,086,871,123	846,263,360
22. Temporary cash investments.....	1,014,309,580	810,385,944
23. Special deposits.....	119,584,026	95,009,455
24. Loans and bills receivable.....	1,640,619	464,015
25. Traffic and car-service balances—Dr.....	54,397,313	46,933,305
26. Net balance receivable from agents and conductors.....	150,905,688	144,659,136
27. Miscellaneous accounts receivable.....	389,976,769	281,556,410
28. Materials and supplies.....	705,713,315	741,110,268
29. Interest and dividends receivable.....	17,749,501	21,535,444
30. Accrued accounts receivable.....	206,403,770	158,653,858
31. Other current assets.....	36,782,317	37,278,755
32. Total current assets (Items 21 to 31).....	3,784,334,021	3,183,849,990

Selected Liability Items	United States	
	1950	1949
40. Funded debt maturing within 6 months <sup>2</sup> .....	\$150,368,315	\$154,741,566
41. Loans and bills payable <sup>3</sup> .....	1,934,869	8,772,307
42. Traffic and car-service balances—Cr.....	118,174,851	91,348,658
43. Audited accounts and wages payable.....	572,559,707	482,471,603
44. Miscellaneous accounts payable.....	217,622,549	183,893,751
45. Interest matured unpaid.....	40,404,822	42,323,814
46. Dividends matured unpaid.....	23,460,321	13,031,449
47. Unmatured interest accrued.....	84,713,139	85,461,135
48. Unmatured dividends declared.....	85,415,847	48,248,398
49. Accrued accounts payable.....	191,089,175	175,700,476
50. Taxes accrued.....	838,153,715	653,830,981
51. Other current liabilities.....	96,005,591	77,886,157
52. Total current liabilities (Items 41 to 51).....	2,269,534,586	1,862,968,729
53. Analysis of taxes accrued:		
53-01. U. S. Government taxes.....	683,157,415	499,124,562
53-02. Other than U. S. Government taxes.....	154,996,300	154,706,419
54. Other unadjusted credits.....	291,565,396	274,983,346

<sup>1</sup> Represents accruals, including the amount in default.

<sup>2</sup> Includes payments of principal of long-term debt (other than long-term debt in default) which becomes due within six months after close of month of report.

<sup>3</sup> Includes obligations which mature not more than one year after date of issue.

Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission. Subject to revision.

of its traffic is less than ten miles. Paying the terminal car hire charges at the current rate in addition to the other greatly increased costs of terminal operation has made it imperative that some redress be obtained on the car hire factor. Repeated efforts to secure favorable action through the Eastern Railroad Presidents Conference and the Association of American Railroads have proved fruitless. The question was therefore taken up with counsel to see what remedies were open to a road in our situation."

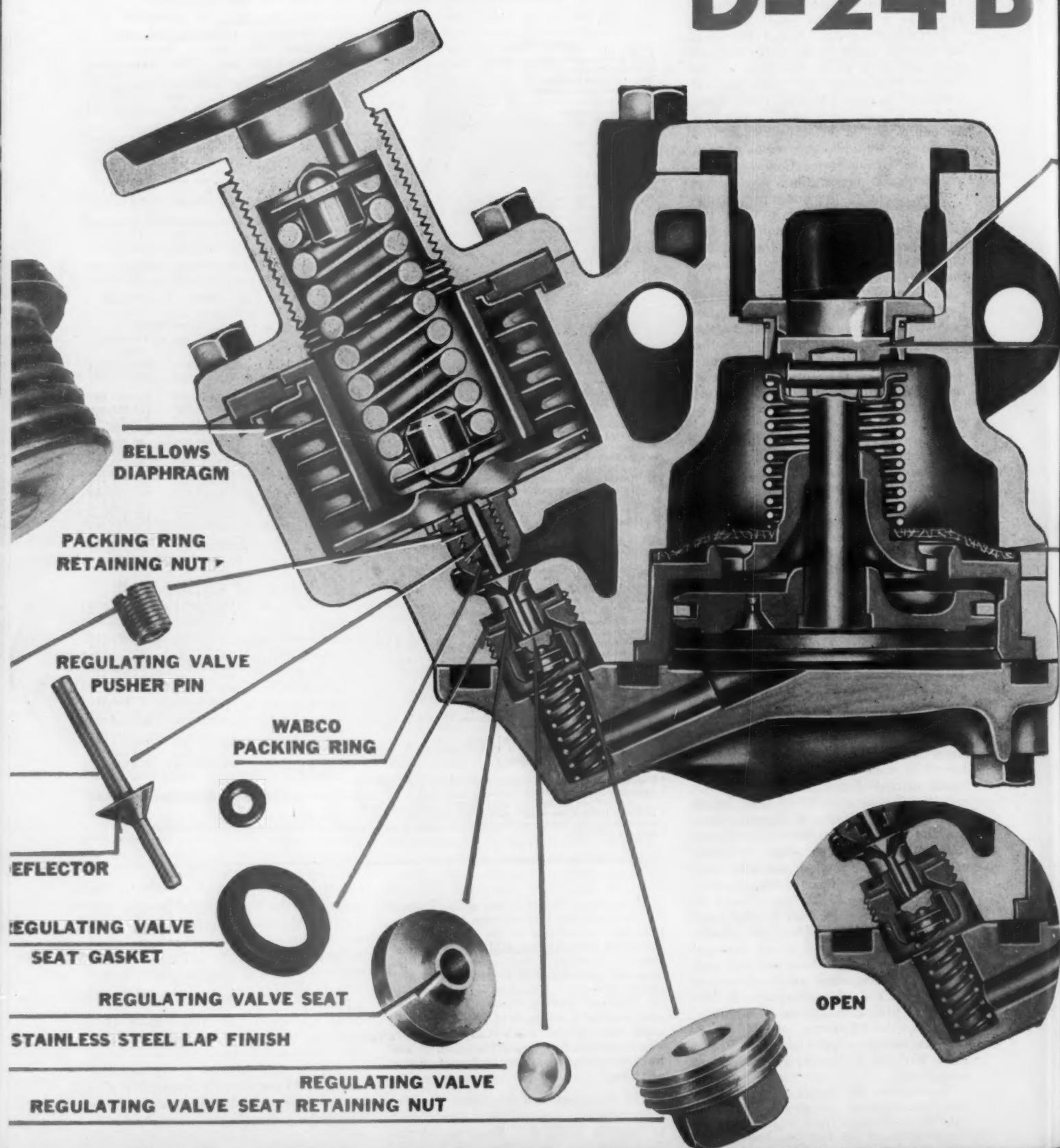
The legal opinion requested by Mr. Norton was contained in a letter sent to him by William J. Donovan of the New York law firm of Donovan, Leisure, Newton, Lombard & Irvine. Mr. Donovan's letter, a copy of which was sub-

mitted to Mr. Faricy, said in part: "So long as the rental-paying roads agree to the rates fixed . . . they are bound to pay whatever rate is fixed . . . but any road has the reserved right to terminate its agreement to the payment of such rates at any time."

As the chief executive officer of a railroad, Mr. Donovan's letter continued, Mr. Norton has the primary duty of acting in the interests of his security holders. As trustee he is responsible also to the court. "Under the law you have the duty," Mr. Norton was told, "to seek to provide jointly with other carriers the payment of 'reasonable compensation,' but you have no legal obligation" (Continued on page 62)

# NEW FEATURES bring IMPORTANT NEW

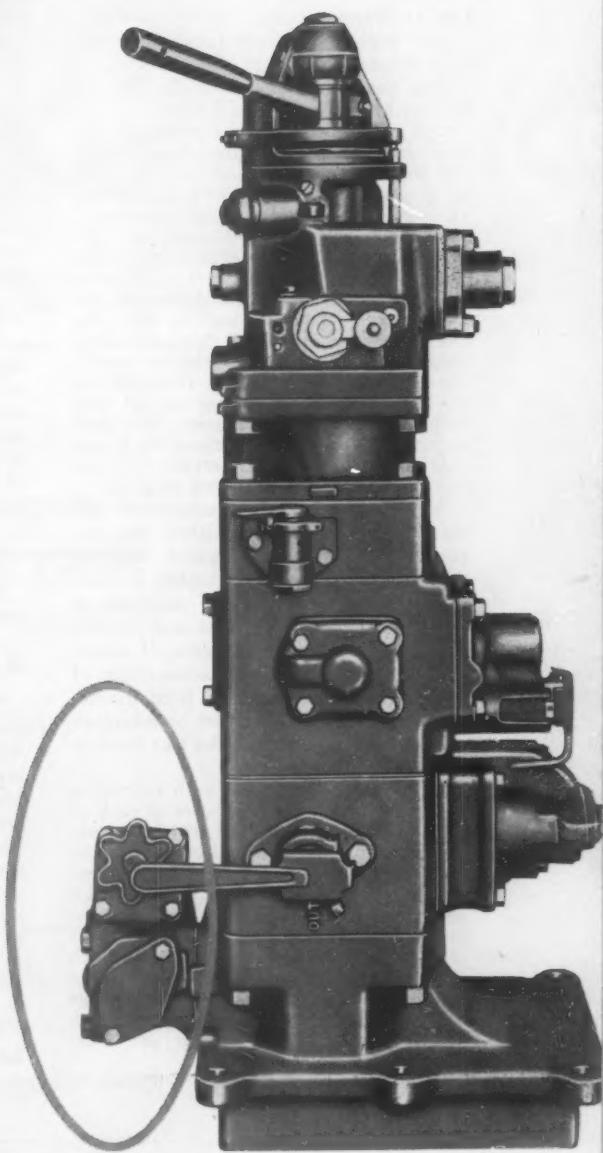
## D-24 B



# Westinghouse Air

WILMERDING,

# ADVANTAGES in this latest FEED VALVE



This newest Westinghouse Development is standard on 24-RL equipment and recommended for 8-ET equipment.

The Disc Regulating Valve and Bellows Diaphragm help to maintain setting more accurately than was previously possible . . . provide unsurpassed smoothness of air flow . . . and reduce maintenance requirements.

Disc valve is stainless steel with low inertia; very sensitive in opening and closing. Pusher pin has small, off-center contact area on disc, giving a hinge movement with graduated opening.

Bellows Diaphragm has uniform pick-up throughout travel. Floating action is devoid of twist or cocking, and stretching and bending flexes are not encountered. "Wabco" packing ring eliminates stem leakage.

Users' tests have demonstrated these desirable features:

1. Uniform pick-up of bellows eliminates variations in settings.
2. Stem wear and leakage—at times a source of trouble with pin type valves—is banned.
3. No surging impacts on diaphragm . . . no diaphragm, hunting.
4. Level flow eliminates jet action . . . reduces air turbulence . . . lowers tendency to deposit oil and carbon in regulating portion.

*Ask for Descriptive Catalog No. 2060*

# Brake Company

PENNSYLVANIA



*(Continued from page 59)*

tion to continue to pay a rate . . . which is not reasonable from your viewpoint as a debtor road."

The Susquehanna action, Mr. Norton said in his letter to Mr. Faricy:

" . . . Is based upon the seemingly obvious fact that any per diem charge which will cover the ownership costs of cars built at present prices and which is applied uniformly to all cars must necessarily greatly exceed ownership costs for cars built before the present inflationary period. We are quite aware that cars built under present circumstances should earn a per diem charge sufficiently high to cover the costs of ownership so that there will be a proper incentive to increase the car supply. We cannot, however, assume responsibility for paying the same charge on old cars built under other circumstances. We shall continue to conduct our operation in accord with all of the car service rules except that fixing the per diem at \$1.75."

Mr. Norton said his suggestions are made in hope that, modified by any equitable consideration which may be advanced, they may be adopted by railroads as a fair means of arriving at compensation which is just and reasonable to car owners and users. If objection is raised that the accounting of such a formula would be burdensome, he continued, it can be met by adoption of a simple procedure. The Car Service Division of the A.A.R.:

" . . . could obtain from each railroad a breakdown of its per diem cars in each of the three age groups. The division would then calculate the weighted average of the car hire for the road by extending these groups at the proposed per diem rate for each group. It would then send to the railroads a list showing the resulting per diem rate to be used in settlement with each railroad. As new cars are placed in service or old cars retired, the change would be reported to the division, which would then distribute a new per diem rate for that road."

Pending adoption of his proposal by

the railroads as a group, Mr. Norton said the Susquehanna, beginning April 1, will settle all per diem accounts at the rate of \$1.20 a car. After receipt of "adequate certification" from any railroad as to the total number of its per diem car ownership, the number of new cars placed in service after January 1, 1945, the number of cars rebuilt at a cost not less than \$1,700 for labor and materials and placed in service after January 1, 1945, and its average compensation under the proposed formula, the Susquehanna will pay the amount by which that average exceeds \$1.20. The Susquehanna will accept payment on the same basis for any of its cars used by other roads, subject to the same adjustments. The proposed procedure will not be applied to cars delivered to and in possession of Seatrain Lines, Inc.

Gunkelman, Fargo, N. D., and A. G. T. Moore, New Orleans, La. Mr. Gunkelman was one of the seven sponsors of the Northwest Shippers' Advisory Board when it was organized in 1923. He has since served the board as general chairman and is currently a member of its executive committee. Mr. Moore helped to found the American Society of Traffic & Transportation, the Southern Traffic League and the Southeast Shippers Advisory Board. He currently serves as traffic manager and forest conservationist of the Southern Pine Association.

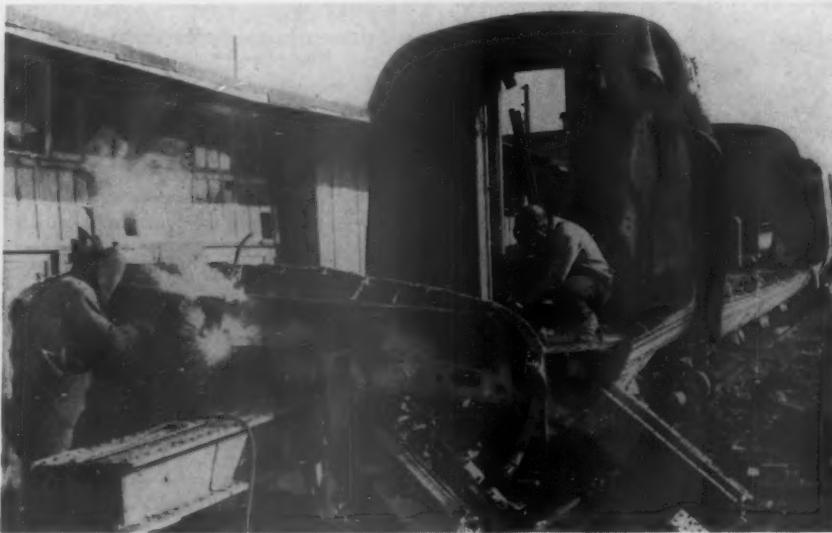
The Association of American Railroads' Medical and Surgical Section will hold its 31st annual meeting on April 2, in the Drake Hotel, Chicago. The first session, which begins at 9:30 a.m., will include an address by the chairman, Dr. Arthur R. Metz, chief surgeon, Chicago, Milwaukee, St. Paul & Pacific; report of the committee on disability and rehabilitation, by Chairman Dr. James K. Stack, chief surgeon, Chicago & North Western; and a progress report on activities of joint committee on railway sanitation, by Dr. Robert M. Graham, director, department of sanitation and surgery, the Pullman Company. Guest speaker at the informal luncheon at 12:30 p.m. will be John P. Kiley, president of the Milwaukee. The second session, beginning at 2 p.m., will include proposed revision of regulations and requirements governing physical examinations, including sight, color sense and hearing tests, for entrance to service, promotion, periodic and special examinations, with method of conduct, as drafted by the committee on developments resulting from physical examinations, whose chairman is Dr. Richard J. Bennett, Jr., chief surgeon, Elgin, Joliet & Eastern; a report of the committee on fractures, by chairman Dr. Duncan Eve, chief surgeon, Nashville, Chattanooga & St. Louis, and proposed revision of recommendations on first aid equipment, by Dr. Robert M. Graham.

## ORGANIZATIONS

### A.R.S.A. Exhibit

Tentative arrangements are being made by the Allied Railway Supply Association, for holding exhibits during the meetings of the Coordinated Mechanical Associations at the Sherman Hotel, Chicago, September 17-20. The Electrical Section of the Association of American Railroads will meet at the same time at the La Salle Hotel. Details concerning the exhibit may be obtained by writing to the secretary of the supply association, P. O. Box 5522, Chicago 80.

The Transportation Association of America has announced the election to its board of directors of R. F.



SUPPLANTED BY MORE MODERN SUCCESSORS, 15 early streamlined luxury cars of the Union Pacific, all purchased in 1936, were recently cut up for scrap at Omaha, Neb. In all,

eight sleepers, three coaches, two diners, a diner-lounge and an observation lounge met the acetylene torch "to make way for progress and to aid national defense."

## SUPPLY TRADE

### N. Y. Syndicate Acquires Karpen Seating Firm

A syndicate, headed by Jay Levine and David Berdon of New York, which is the principal shareholder of International Furniture Company, has purchased the business of S. Karpen & Bros., manufacturers of transportation seating and other furniture. Terms of the sale were not made public.

"We will preserve the Karpen name in our merchandising, and we will continue the Karpen line of goods," Mr. Levine declared in announcing the transaction. He added that activities of (Continued on page 67)

CHICAGO & NORTH WESTERN RAILWAY CO.

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DIESEL LOCOMOTIVE  
UTILIZATION and MAINTENANCE  
STATISTICS

---

a Summary of performance statistics  
obtained by the North Western on  
Fairbanks-Morse 1000 hp. Switchers  
used in one of the world's largest  
freight classification yards

DIESEL LOCOMOTIVE UTILIZATION AND MAINTENANCE

---

<u>Fairbanks-Morse - 1000 hp. Switchers</u>	<u>1950</u>	<u>1949</u>
Units Owned .....	21	17
Unit Days Owned .....	7,581	4,728
Miles Operated .....	896,007	550,816

Out of Service for Inspection

and Maintenance, (Unit Days Owned) .....	502	639
% Out of Service .....	6.6%	8.4%
Availability .....	93.4%	91.6%

①

Lube Oil Used

Total Gallons .....	19,772	13,160
Average Use.....	2.2 gals/100 miles	2.3 gals/100 mi.

②

Maintenance (Cost per Mile)

Fairbanks-Morse 1000 hp. Switchers .....	14.2¢	17.0¢
--	-------	-------

③



# Fairbanks, Morse & Co.

600 SOUTH MICHIGAN AVENUE  
CHICAGO 5

## ① this is High Availability!

-so important to the North Western's freight operation where 85% of the trains are "time freight." This important advantage is due chiefly to the Opposed-Piston Engine, coupled with progressive overall locomotive design. Here's reliability that means more time on the rails.

## ② Economy!

-both in lubricating oil and fuel. That's why Fairbanks-Morse road freight, transfer and switching locomotives have been so rapidly adopted by railroads of every size, for every kind of service. Here's economy that means lower cost per mile operation.

## ③ Lower Maintenance Cost!

-all Fairbanks-Morse Locomotives are noted for low maintenance cost. Opposed-Piston, two-cycle design eliminates valves, cylinder heads -- there are 40% fewer moving parts to maintain. Maximum accessibility means the engine can be serviced -- even completely overhauled -- far faster. Here ease of maintenance gives minimum turn-around time.

For Reliable, Economical Performance  
in Every Type of Yard Service  
...it's FAIRBANKS-MORSE Locomotives  
with Opposed-Piston Diesel Horsepower!

# Fairbanks, Morse & Co.

600 SOUTH MICHIGAN AVENUE

CHICAGO 5

*Outstanding Performance  
in Every Kind of Service!*

The records established on the North Western are typical of the outstanding performance of Fairbanks-Morse Locomotives. Similar data from the country's leading railroads prove that Opposed-Piston horsepower sets the standard for reliability, high availability, economy of operation and lower maintenance.

Whatever your requirements, you'll find a Fairbanks-Morse Locomotive exactly suited to your service. There are 1200, 1600, 2000 and 2400 hp. Opposed-Piston diesel locomotives with axle loadings and gear ratios that give outstanding performance on high-speed freight, heavy-duty yard and transfer, commuter and switching service.



*One of the  
North Western's Fleet  
of FAIRBANKS-MORSE  
1000 hp. Locomotives  
on the job at Proviso*



**FAIRBANKS-MORSE,**

*a name worth remembering*

DIESEL LOCOMOTIVES AND ENGINES  
ELECTRICAL MACHINERY • PUMPS  
SCALES • HOME WATER SERVICE EQUIPMENT  
RAIL CARS • FARM MACHINERY

The Columbus, Indiana, executives to Foster, a tentative management new deal. John W.

(Continued from page 10)  
International by the  
ordinate division

The Chicago  
portation  
teen-two

### Electric Locomotives

Production  
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The Cummins Engine Company, Columbus, Ind., has appointed two sales executives as direct factory representatives to governmental agencies. C. B. Foster, left, national accounts representative at Chicago, has been appointed manager—contract sales to head a new department of the sales division. John W. Post, right, representative at



Washington, D.C., has been appointed regional manager of the newly created Washington region. Mr. Foster will divide his time between Columbus, Ohio, Chicago, and Washington, on direct government contract work, and will also assist in liaison with all other Cummins departments on indirect government sales

(Continued from page 62)

International and Karpen, if approved by the stockholders, will be coordinated, but that two separate sales divisions will be maintained.

The Karpen concern, founded in Chicago 71 years ago, has made transportation seating since the early nineteen-twenties.

### Electro-Motive to Build Locomotives in Australia

Production of diesel-electric locomotives in Australia will begin shortly under an arrangement concluded between the Clyde Industries of Sydney, New South Wales, and the Electro-Motive Division of General Motors Corporation, La Grange, Ill., according to an announcement issued on March 20 by B. A. Dollens, general manager of E.M.D.

The start of production will be the cumulation of two years of development work, including a study of motive power requirements of Australian railways and the design of a special model to fit those requirements, plus the requirements for economic manufacture in Australia. Mr. Dollens said.

Initial orders cover 28 locomotives—11 1,500-hp., 6-axle, 4-motor type for the Commonwealth Railways and 17 1,500-hp., 6-axle, 6-motor type for the Victorian Railways. Both types will weigh approximately 100 tons. The engine and power transmission equipment will be produced at the La Grange works of Electro-Motive and shipped to Australia, and there assembled in locomotives built by Clyde.

Mr. Dollens said it was expected that the first locomotive would be running before the end of this year. "It is hoped that, embodying the proven experience of many thousand locomotives on American railroads, they will set a new

standard of performance and economy for Australian railroads" he added.

**Paul B. Baird**, formerly assistant manager of standard pipe sales for the **Youngstown Sheet & Tube Co.**, has been promoted to manager of standard pipe sales, succeeding the late **Glenn W. Christopher**. **Carl T. Selander**, formerly western representative for standard pipe products, has been promoted to succeed Mr. Baird as assistant manager of standard pipe sales at Chicago.

The **Pettibone Mulliken Corporation**, Chicago, has purchased the Rome Grader division of the **Union Fork & Hoe Co.**, Rome, N. Y.

**Dan Call** has been appointed sales agent for the **Standard Car Truck Company**, with headquarters at Richmond, Va. Mr. Call was formerly associated with the Richmond, Fredericksburg & Potomac for 20 years and was general foreman of the locomotive department when he left that road in 1948 to enter private business. **Frank Nugent** has been appointed sales agent, with headquarters at St. Paul, Minn.

**Thomas M. Murphy, Jr.**, formerly with the Aireon Manufacturing Company, has been appointed plant engineer for the **Bendix Radio Division** of the **Bendix Aviation Corporation**, Baltimore, Md.

**Raymond H. Schaefer** has been elected a vice-president of the **American Brake Shoe Company**, with headquarters at Mahwah, N. J. Mr. Schaefer joined Brake Shoe in 1940 as assistant foundry metallurgist of the American Manganese steel division, and was successively foundry metallur-

gist and general foundry superintendent. In 1943 he was appointed assistant chief metallurgist of the parent company and, in 1945, chief metallurgist. He was appointed director of research and development in 1947 and will continue in charge of the research activities of the company.

The Lima-Hamilton division of the **Baldwin-Lima-Hamilton Corporation**, Lima, Ohio, has appointed **Henry Barnhart** as general manager of the Lima plant and **J. F. Connaughton** as assistant general manager. Mr. Barnhart, also a vice-president, has been associated with Baldwin-Lima-Hamilton and predecessor companies since 1928. He was appointed general sales manager in 1936 and vice-president in 1944. Mr. Connaughton, also special assistant to **Walter A. Rentschler**, vice-president in charge of the division, has likewise been with the corporation since 1928.

**William R. Wilkinson**, formerly general merchandise manager of the building products division of the **Johns-Manville Corporation**, has been appointed vice-president for sales, succeeding **L. M. Cassidy**, whose election as chairman of the board and chief executive officer was announced in *Railway Age* of March 12, page 102. **Kenneth W. Huffine** has been appointed vice-president for production, succeeding **A. R. Fisher**, whose appointment as president also was announced in *Railway Age* of March 12.

Mr. Wilkinson joined Johns-Manville in 1925 as a sales representative in the New Orleans, La., district. Later, he was successively appointed assistant district manager of Milwaukee, Wis., and manager of the building products district office at Philadelphia, Pa. He has been general merchandise manager of the building products division for the past five years.

Mr. Huffine has been associated with Johns-Manville for 26 years and was successively manager of company plants at Alexandria, Ind., and Waukegan, Ill., before assuming direction of the general engineering department.

**Robert J. Stoddard**, chief engineer of the **American Hoist & Derrick Co.**, St. Paul Minn., since 1947, has been appointed vice-president of engineering.

**John R. Fennie**, a member of the sales staff of the Los Angeles, Cal., plant of **Joseph T. Ryerson & Son** since 1946, has been appointed manager of the tubular products department.

**Robert C. Augur**, consulting editor of the *Locomotive Cyclopedias* and the *Car Builders' Cyclopedias*—publications of the **Simmons-Boardman Publishing Corporation**—has retired. Mr. Augur was born on June 24, 1866, at New Haven, Conn. He attended Hillhouse High School, New Haven,

# passenger traffic number

May 21, 1951

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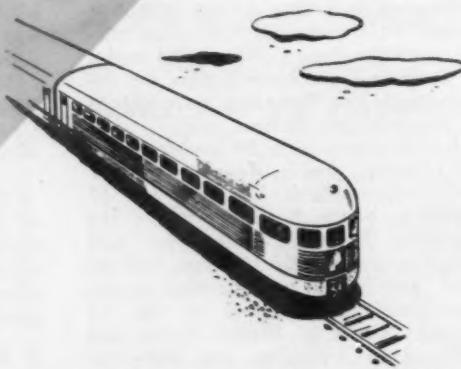
This year, *Railway Age* will publish its first special Passenger Traffic Number in May . . . at the beginning of the summer travel season.

As for the past 12 years when it has featured passenger service in the fall—*Railway Age* in its May 21 issue will concentrate attention on railway passenger service and equipment, with a special vacation feature on "where to go and how to get there by rail".

It will exert the greatest single force of the year to stimulate "tour and travel by rail". To make it an effective advertising medium for the railways, copies will be distributed to inter-line ticket agents throughout the United States and Canada, and to important travel agencies.

For manufacturers, the theme and content of this issue will focus favorable attention on products that aid the railways to promote travel by rail and build public good-will.

*It's an issue which railways will find ideal for advertising their "where and how to go" suggestions for travel and vacation; and in which manufacturers can show what makes modern train travel tick.*



**RAILWAY AGE**

May 21 issue . . .  
closes April 30

13th annual passenger service number

and is a graduate of Sheffield Scientific School, Yale University (1887). He entered railroad service as a special apprentice in the test department of the Chicago, Burlington & Quincy at Aurora, Ill., in 1887 and later became assistant enginehouse foreman. From 1890 until 1905 he was assistant mechanical engineer and chief engineer of the New York Air Brake Company at Watertown, N. Y. In the latter year he became resident engineer of the



Robert C. Augur

Westinghouse Air Brake Company at Wilmerding, Pa., and in 1910, engineer of tests for the American Brake Shoe Company. In 1917 Mr. Augur was appointed director of inspection for the Westinghouse Electric & Manufacturing Co. at Philadelphia, Pa., and in 1919 installation engineer, propelling machinery, for the Federal Shipbuilding Company. He became managing editor of the *Locomotive* and *Car Builders' Cyclopedia* in 1920, and consulting editor in 1948.

The Cleco division of the **Reed Roller Bit Company**, Houston, Tex., has appointed the **Gil Boers Equipment Company**, 7625 S. Kedzie avenue, Chicago, and the **Airline Equipment Company**, 2024 Frankford avenue, Philadelphia, Pa., as distributors of Cleco products in those areas.

## CONSTRUCTION

### S. P. to Build \$4.5 Million Yard at Roseville, Cal.

A certificate of necessity has been received from the Defense Production Administration for construction of a new yard at Roseville, Cal., 17 miles east of Sacramento. The present yard at Roseville handles up to 7,000 cars per day. The new yard—on which work will start as soon as contracts can be let—will feature electro-pneumatic car retarders, radio communication with talk-back speakers located throughout the yard, floodlighting for night opera-

tion, inspection pits and towers and other modern facilities. It is expected to cost \$4.5 million.

**Chicago & Eastern Illinois.**—Coal handling facilities capable of transferring approximately 10,000 tons of coal daily from freight cars to barges will be built at Joppa, Ill., at a cost of about \$250,000. The road is currently asking for bids on the project and it is expected that the work will be completed before the end of the year. Plans call for installation of a 700-ft. conveyor belt 48 in. wide, yard and storage tracks, a hopper bin and a car shaker to clean the cars. In addition, there will be extensive improvements to harbor facilities at Joppa, including dredging, deepening and installation of concrete supports, pilings and tie-up buoys.

**West Virginia Northern.**—Examiner Lucian Jordan has recommended that Division 4 of the I.C.C. authorize this road to construct a branch line of approximately 5.8 miles, extending from Howesville, W. Va., to a point near Brown's Mills. The new line would serve an area of about 7,000 acres of coal land, and traffic is expected to be about 30 carloads per day. The net cost of the branch line to the road is estimated at \$177,326.

## EQUIPMENT AND SUPPLIES

### FREIGHT CARS

The **Atchison, Topeka & Santa Fe** has ordered 250 70-ton ballast cars from the American Car & Foundry Co.

The **Bangor & Aroostook** has ordered 500 40-ton refrigerator cars from the Pacific Car & Foundry Co. at an estimated cost of \$4,500,000. Delivery is scheduled for the fourth quarter of 1951. These cars were originally ordered from the road's own shops (see *Railway Age* of January 22, page 42.)

The **Canadian National** has ordered 1,000 40-ton 40½-ft. automobile box cars and 100 30-ton 40-ft. 8-in. flat cars from the Canadian Car & Foundry Co. The flat cars are for service on the road's Newfoundland lines.

The **Chicago & Eastern Illinois** has ordered 500 70-ton and 500 50-ton hopper cars from the Pressed Steel Car Company.

The **Delaware, Lackawanna & Western** has ordered 500 50-ton hopper cars from the American Car & Foundry Co. An inquiry by this road for 500 to 1,000 hopper cars was reported in *Railway Age* of January 22, page 42.

The **Grand Trunk Western** has ordered 250 50-ton box and 250 70-

ton hopper cars from the American Car & Foundry Co.

The **Great Northern** has ordered 1,000 70-ton ore cars from the American Car & Foundry Co. The inquiry for this equipment was reported in last week's *Railway Age*, page 51.

The **Missouri Pacific** has ordered 100 50-ton pulpwood cars from its De Soto, Mo., shops. The cars are scheduled to be built in May.

The **Southern Pacific** has ordered 500 70-ton ballast cars from the American Car & Foundry Co. and 100 70-ton 65½-ft. gondola cars from the Greenville Steel Car Company.

The **Texas & Pacific** has ordered 250 70-ton gondola cars from its Marshall, Tex., shops. The cars will be built in 1952.

## LOCOMOTIVES

### Locomotives on Order Totaled 1,652 on March 1

Class I railroads had a backlog of 1,652 new locomotives on order March 1, as compared with 1,111 on March 1 last year, according to the Association of American Railroads. Those awaiting delivery on March 1 this year included 1,627 diesel-electrics, 21 steam and 4 electrics. A year ago the backlog included 1,095 diesel-electric, 12 steam and 4 electric locomotives.

The A.A.R. said 408 locomotives were installed in the first two months of 1951, of which 407 were diesel-electric and 1 steam. In the same period of 1950, Class I roads installed 286 locomotives, including 285 diesel-electrics and 1 steam.

The **Texas & Pacific** has ordered 52 diesel-electric locomotive units from the Electro-Motive Division of General Motors Corporation for delivery in the second half of 1951. Included are seven 3-unit, 4,500-hp., four 2-unit 3,000-hp. and one 1,500-hp. freight locomotives; three 2-unit 4,500-hp. and two 2,250-hp. passenger locomotives; six 1,500-hp. road-switching locomotives; and eight 1,200-hp. switching locomotives. With delivery of this motive power, all regular passenger trains on the system and all regular freight train operations west of Shreveport, La., will be dieselize, as well as all switching operations at important points in Texas and Louisiana.

## PASSENGER CARS

The **Pennsylvania** has ordered 64 streamlined all-stainless steel passenger cars from the Budd Company with which to re-equip completely the "Congressional" and the "Senator." The road's plan to provide new equipment for these trains was reported in *Railway Age* of November 18, 1950, page 76. The cars will provide two 17-car trains between New York and

Washington for the "Congressional" and two 15-car trains for the "Senator" for the Washington-Boston service.

The "Congressional" equipment will include a new type parlor car with seven private rooms, each accommodating five passengers, designed for conferences or family groups. These trains will accommodate 827 passengers and provide dining facilities for 112 in a full-length twin-unit dining car, and in a coffee-shop car for coach passengers. There will be a mid-train lounge and an observation lounge car for Pullman passengers. Each set of equipment for the "Senator" will accommodate 767 passengers with dining and coffee shop accommodations for 92. The new cars are to be built "as rapidly as possible."

### SIGNALING

**The Gulf, Colorado & Santa Fe** has ordered from the Union Switch & Signal Co. material to install interlocking facilities at Dallas, Tex. The order includes a style B-30 control machine, style H-5 searchlight signals and N-2 dwarf signals, style M-22A dual-control electric switch machines, relays, rectifiers and housings. Field installation will be handled by railroad forces.

### FINANCIAL

**Central of Georgia.**—*Sale of Water Carrier Rights.*—The I.C.C. has authorized groups of Eastern and Southern roads to intervene in opposi-

tion to the proposed transaction wherein Seatrail Lines, Inc., would acquire the operating certificate of Ocean Steamship Company, a Central of Georgia subsidiary. (See *Railway Age* of February 19, page 37). If the acquisition by Seatrail is approved that company expects to resume New York-to-Savannah operations, and the intervening roads say this new service "will be competitive with and detrimental to the service of your petitioners." Central of Georgia has not operated the coastwise line since 1942.

**Chesapeake & Ohio.**—*Sale of Stock.*—Division 4 of the I.C.C. has approved this road's plan to sell 112,500 shares of its common stock to 24 of the road's top executives. (See *Railway Age* of March 5, page 80). The stock will be sold under a stock option incentive plan adopted by the C&O. January 9. The option plan runs to December 31, 1957, and the first 20 per cent of the stock may be purchased on or before May 1. The executives will pay the higher of two prices: Either \$36.125 a share, the market price the day the plan was adopted, or the closing price of the stock on the New York Stock Exchange on such date as the Treasury Department determines the option was actually granted.

In approving the plan, Division 4 imposed a condition that should subsequent options be granted because of lapses of the original options, such sales are to be at the fair market value of the stock at that time, and in no event less than par.

**Huntingdon & Broad Top Mountain.**—*New Trustee.*—Appointment of

Glenn A. Troutman as successor trustee of this road has been ratified by Division 4 of the I.C.C. Mr. Troutman succeeds the late C. Stevenson Newhall.

**New York, Susquehanna & Western.**—*Reorganization.*—The I.C.C. has made some "slight changes" in this road's plan of reorganization as approved March 5, 1945. Among other things, these changes provide for establishment of a security retirement fund, to be used for the retirement of series A general mortgage income bonds and preferred stock; elimination of Prudential Insurance Company and Mutual Benefit Life Insurance Company in the selection of voting trustees and reorganization managers; and clarification of provisions for electing directors of the new company.

### New Securities

**Applications** have been filed with the I.C.C. by:

**DENVER & RIO GRANDE WESTERN.**—To issue and sell \$40,000,000 of first mortgage series B bonds, to be dated May 1 and scheduled to mature May 1, 1981. Proceeds from sale of these bonds, estimated at \$39,200,000, would be applied toward redeeming the road's series A first mortgage bonds and outstanding income mortgage bonds of the Denver & Salt Lake. The bonds scheduled for redemption total \$46,239,089, including interest and premiums. The road would furnish approximately \$7,039,089 from cash on hand. This refunding would thus reduce D&R.G.W.'s funded debt, and at the same time the road expects "substantial savings in interest." Present series A bonds bear interest at 4 per cent; the rate on the series B bonds would be set by competitive bidding.

In seeking I.C.C. approval of the new issue of first mortgage bonds, the road also asked authority to offer the new bonds in exchange for bonds now outstanding. It said such an exchange offer may not actually be made, but that it "now contemplates" making the offer. Both issues of bonds being called in would otherwise mature January 1, 1993. Under this plan, the

### ANNUAL REPORTS

Railroad	Operating Revenues	Operating Expenses	Fixed Charges	Net Income	Current Assets*	Current Liabilities*	Long Term Debt*
Atchison, Topeka & Santa Fe. 1950	\$522,675,610	\$350,797,219	\$8,329,320	\$82,141,791	\$256,391,283	\$127,252,847	\$209,577,280
1949	482,753,947	363,134,801	8,337,749	50,042,147	196,950,041	87,047,689	214,877,736
Detroit, Toledo & Ironton ... 1950	17,939,733	10,121,009	359,778	3,232,703	9,548,344	5,833,541	14,148,231
1949	15,049,254	9,570,873	357,600	2,495,520	6,402,192	3,630,168	13,396,082
Gulf, Mobile & Ohio ... 1950	78,428,088	55,152,810	1,808,417	8,022,824	35,872,687	26,364,307	78,424,021
1949	71,531,471	55,692,163	1,856,780	4,000,262	30,767,802	21,805,327	79,891,436
Hudson & Manhattan ... 1950	7,251,154	6,086,561	1,471,555	471,890d	1,898,674	1,590,164	46,339,405
1949	6,468,726	5,492,915	1,691,636	725,367d	1,470,686	1,534,408	46,339,405
International of Central America ... 1950	13,466,226	11,193,877	323,686	1,188,272	5,456,764	1,348,925	6,463,025
1949	12,395,066	11,544,334	351,275	166,831	5,700,696	1,025,732	6,860,200
Lehigh & New England ... 1950	8,473,101	4,768,631	203,903	2,060,775	3,925,306	3,232,028	7,403,816
1949	7,698,389	4,974,106	178,731	1,633,233	2,621,632	2,426,785	8,023,473
Lehigh Valley ... 1950	71,236,123	54,738,120	3,849,721	3,620,896	23,963,676	11,998,067	134,928,714
1949	69,181,281	56,573,531	5,374,426	174,264	25,544,556	8,441,748	92,544,221
Louisville & Nashville ... 1950	203,016,524	150,684,793	7,440,903	24,308,261	93,140,479	42,022,782	222,673,413
1949	177,396,626	149,456,689	7,410,766	8,216,805	68,144,523	24,462,055	212,582,935
Minneapolis, St. Paul & Sault Ste. Marie ... 1950	38,369,978	26,075,082	13,919,151	1,544,969	19,789,235	10,454,025	21,110,800
1949	35,430,968	32,829,796	3,914,032	1,148,481	17,974,938	8,209,826	21,295,400
Norfolk Southern ... 1950	9,573,562	7,953,845	267,181	588,588	2,855,727	1,373,604	7,065,397
1949	8,766,385	7,080,463	247,005	441,778	2,570,318	1,780,915	8,193,206
Northern Pacific ... 1950	167,228,069	121,845,190	10,370,763	19,510,767	92,944,954	40,102,180	268,915,830
1949	150,176,138	125,184,241	10,222,325	9,734,443	59,515,387	28,971,953	274,473,688
Reading ... 1950	118,952,177	93,530,278	5,536,280	9,307,650	37,059,716	26,800,325	110,067,137
1949	109,747,174	91,266,297	5,421,783	5,889,055	33,719,492	21,347,918	104,672,152
Seaboard Air Line ... 1950	135,536,776	98,822,143	2,326,342	14,175,148	48,643,042	32,033,427	111,887,000
1949	122,894,178	98,870,491	1,911,009	8,156,293	39,158,948	25,700,059	106,487,300
Southern Pacific System ... 1950	598,262,728	437,315,363	20,808,560	50,839,062	236,899,719	123,448,347	661,799,739
1949	537,518,704	424,833,131	20,612,076	30,479,645	181,315,493	95,642,000	636,080,770
Union Pacific ... 1950	465,283,516	327,013,966	5,565,280	69,761,549	219,880,119	122,800,250	215,396,183
1949	398,823,082	317,922,665	5,766,477	49,589,726	181,139,385	85,071,316	225,991,778

\*On December 31  
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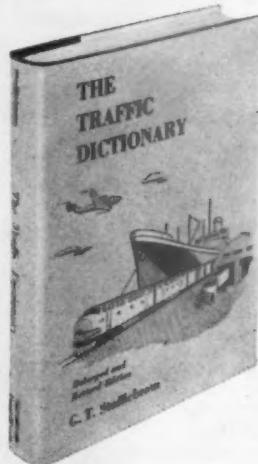
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R.A. 3-26-51

series A bonds would be called on June 1, and the D&L bonds on July 1.

**SOUTHERN PACIFIC.**—To assume liability for \$12,000,000 of series EE equipment trust certificates to finance in part 39 diesel-electric locomotives and 4,231 freight-train cars. Total cost for all the equipment, including freight charges, is estimated at \$35,454,077, and the road said the new certificates will be applied toward not less than \$16,000,000 of this equipment. The locomotives and cars were listed as follows:

Description and Builder	Estimated Unit Cost
14 6,000-hp. freight locomotives, each consisting of 2 lead and 2 booster units (Electro-Motive Division, General Motors Corporation)	\$657,889
3 3,200-hp. freight locomotives, each consisting of 1 lead and 1 booster unit (Baldwin-Lima-Hamilton Corporation)	374,956
1 3,200-hp. freight locomotive, consisting of 1 lead and 1 booster unit (B.-L.-H.)	353,087
2 1,600-hp. freight locomotives (B.-L.-H.)	184,682
1 1,600-hp. freight locomotive booster unit (B.-L.-H.)	175,520
8 1,200-hp. switching locomotives (B.-L.-H.)	97,600
10 660-hp. switching locomotives (American Locomotive Company)	80,370
1,500 50-ton box cars (Pullman-Standard Car Manufacturing Company)	5,336
1,000 50-ton box cars (Pullman-Standard)	5,225
250 70-ton hopper cars (American Car & Foundry Co.)	6,547
431 50-ton automobile cars (Southern Pacific Equipment Company)	6,347
1,000 50-ton gondola cars (S. P. Equipment Co.)	4,406
50 caboose cars (S. P. Equipment Co.)	7,759

The certificates, to be dated April 1, would mature in 15 annual installments of \$800,000 each, beginning April 1, 1952. They would be sold on the basis of competitive bids, with the interest rate to be set by such bids.

### Security Price Averages

	Mar.	20	Last	Week	Last
Average price of 20 representative railway stocks	55.45	55.20	42.52		
Average price of 20 representative railway bonds	97.70	97.69	92.55		

### Dividends Declared

**Kalamazoo, Allegan & Grand Rapids.**—\$2.95, semiannual, payable April 2 to holders of record March 15.

**Minneapolis & St. Louis.**—common, 25¢, payable March 15 to holders of record March 9.

**Savannah & Atlanta.**—common, \$1, quarterly; 5% preferred, \$1.25, quarterly, both payable April 1 to holders of record March 14.

**Spokane International.**—\$2.50, payable April 2 to holders of record March 15.

**Texas & Pacific.**—common, \$1.25 (increased quarterly); preferred, \$1.25, quarterly, both payable March 30 to holders of record March 26.

**Wabash.**—common, \$1; 4½% preferred, \$4.50, annual, both payable April 19 to holders of record March 30.

### Investment Publications

[The surveys listed herein are, for the most part, prepared by financial houses for the information of their customers. Knowing that many such surveys contain valuable information, *Railway Age* lists them as a service to its readers, but assumes no responsibility for facts or opinions which they may contain bearing upon the attractiveness of specific securities.]

**Baker, Weeks & Harden**, 1 Wall st., New York 5.

**Chicago, Indianapolis & Louisville Railway Company**. February 23.

**Railroad Review**. Monthly revision of railroad statistics giving important year-end figures. March 9.

**Rock Island**. February 21.

**H. Hentz & Co.**, 60 Beaver st., New York 4.

*An Analysis of the Eastern Railroads*. March 19.

**Kerr & Co.**, General Petroleum bldg., Los Angeles, Cal.

**Atchison, Topeka & Santa Fe**. February 26, No. 953.

**Smith, Barney & Co.**, 14 Wall st., New York 5.

**Quality Now the Keynote in Rail Stock and Bond Selection**. An adaptation of an address given by Walter F. Hahn before the Railroad Forum of the Third Midwest Forum of the National Federation of Financial Analysts Societies at Chicago on January 17. Railroad Bulletin No. 54, March 8.

**Vilas & Hickey**, 49 Wall st., New York 5.

**Erie Railroad Company**. February 26.

**St. Louis-San Francisco Railway**. March 9.

**J. R. Williston & Co.**, 115 Broadway, New York 6.

*Current Position of Railroad Securities*. March 5.

N. Y., has been appointed superintendent of the Mohawk and Hudson divisions at Albany, N. Y., succeeding **John F. Nash**, who replaces Mr. Johnston at Boston. **Irving A. Olp**, trainmaster at Buffalo, has been appointed assistant to general manager at Syracuse, N. Y., succeeding **Gregory W. Maxwell**, who succeeds Mr. Pangburn as assistant superintendent of the Buffalo division at Buffalo. **Walter M.**



**Richard G. May**

### EXECUTIVE

**James J. Frawley**, assistant vice-president, operations and maintenance, of the **NEW YORK CENTRAL SYSTEM**, has been appointed vice-president, operations and maintenance, with headquarters as before at New York, succeeding **Frank J. Jerome**, whose appointment as executive vice-president was noted in the *Railway Age* of February 26. **Richard G. May**, man-



**James J. Frawley**

**Jackson**, assistant trainmaster at Springfield, Ohio, succeeds Mr. Olp as trainmaster at Buffalo.

Mr. Frawley was born at Buffalo in 1888 and entered the service of the N.Y.C. as a telegraph messenger there in 1902, becoming an operator in 1906 and train dispatcher in 1914. He was appointed trainmaster in 1918, assistant superintendent in 1937 and superintendent in 1940, all at Erie, Pa. In 1943 Mr. Frawley became assistant to general manager at Cleveland, Ohio, and in 1945 was appointed assistant general manager. He trans-



**Harry D. Johnston**

ferred to Syracuse in 1947 and later that same year became general manager. In April 1949 he was appointed assistant vice-president, operations and maintenance, at New York.

Mr. May was born at Murray, Pa., in 1904 and was graduated from Chi-

cago Technical School with a degree in civil engineering. He entered railroad service with the N.Y.C. in 1928 as a rodman in the district engineer's office at Syracuse and was appointed assistant supervisor of track at Cleveland in 1932; trainmaster at Watertown, N. Y., in 1939; trainmaster of the River division at Weehawken, N. J., in 1941, and assistant superintendent of the New York Terminal district in 1946, transferring to Grand Central Terminal in 1948. Later that year he became superintendent at Albany, and in 1949 was appointed general manager of the B&A. at Boston. On March 1, 1950, Mr. May was appointed manager of freight transportation at New York.

Mr. Johnston was born at Red Bank, N. J., in 1899 and entered the service of the N.Y.C. as a yard clerk at Buffalo in 1916. He was promoted to yardmaster in 1922, general yardmaster in 1934, trainmaster in 1940 and assis-



John F. Nash

tant superintendent in 1947, all at Buffalo. In 1949 he was promoted to superintendent at Albany and in February 1950 became general manager of the B&A. at Boston.

Mr. Nash was born at Syracuse in 1909 and entered railroad service there in 1925 as a clerk in the N.Y.C. freight station. He was appointed car service agent in the office of the assistant general manager in 1941 and the next year was appointed special agent to the superintendent at Buffalo, subsequently becoming assistant trainmaster and trainmaster there. In 1948 Mr. Nash returned to Syracuse as assistant to general manager and later that year he was appointed assistant superintendent of the B&A. at Boston. On March 1, 1950, he became superintendent at Albany.

Mr. Pangburn was born at Jeffersonville, Ind., in 1901 and joined the N.Y.C. in 1920 as a brakeman at Louisville, Ky., where he became a conductor in 1935. He was appointed general yardmaster at Danville, Ill., in 1942, assistant trainmaster at Cincinnati, Ohio, in 1944 and trainmaster in 1945. In 1948 he became assistant to general manager at Syracuse and the following

year was appointed assistant superintendent at Buffalo.

Henry W. Craig has been appointed assistant to vice-president in charge of traffic of the CANADIAN NATIONAL SYSTEM at Montreal, Que., and Hector L. LaPointe has been named assistant to assistant vice-president of freight traffic of the Canadian lines of the road at Montreal.

#### OPERATING

Thomas W. Flickinger, district manager of the Car Service Division of the ASSOCIATION OF AMERICAN RAIL-

ROADS at Omaha, Neb., has been transferred to St. Louis, Mo., to succeed Herman H. Albers, who has been furloughed because of ill health. Kenneth J. Winn, car service agent at Kansas City, Mo., has been named district manager of the C.S.D. at Omaha. Mr. Winn began his railroad career in 1917 in the Car Service department of the Norfolk & Western. He joined the staff of the A.A.R. in 1941 as car service agent at Boston, Mass., and later that same year was transferred to Washington, D. C., where he remained until 1946, serving in various capacities in the passenger car and other sections. Mr. Winn was

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named car service agent at Kansas City in 1946 and has acted also as field secretary of the Trans-Missouri-Kansas Shippers Board.

**William J. Fox**, trainmaster of the UNION PACIFIC, has been appointed assistant terminal superintendent, with headquarters remaining at Los Angeles, Cal.

**Charles H. Winter**, superintendent of transportation of the CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC's Eastern lines, has been promoted to general superintendent of transportation, with headquarters as before at Chicago, effective April 1. He succeeds **James L. Brown**, who is retiring, as reported in the March 19 *Railway Age*. Transferred to succeed Mr. Winter is **Clarence A. Nummerdor**, superintendent of transportation at Seattle, Wash., since 1946. **Vern P. Sohn**, special representative to the vice-president in charge of operations at Seattle, succeeds Mr. Nummerdor.

## FINANCIAL, LEGAL & ACCOUNTING

**Kenneth F. Stone**, acting general counsel and general attorney of the NEW YORK CENTRAL SYSTEM, has been appointed general counsel-general attorney, with headquarters as before at New York. As general counsel, Mr. Stone will be in charge of the law, land and tax, and claim and medical departments. These duties had been in charge of the late **Jacob Aronson**, vice-president and general counsel, until his retirement late last December

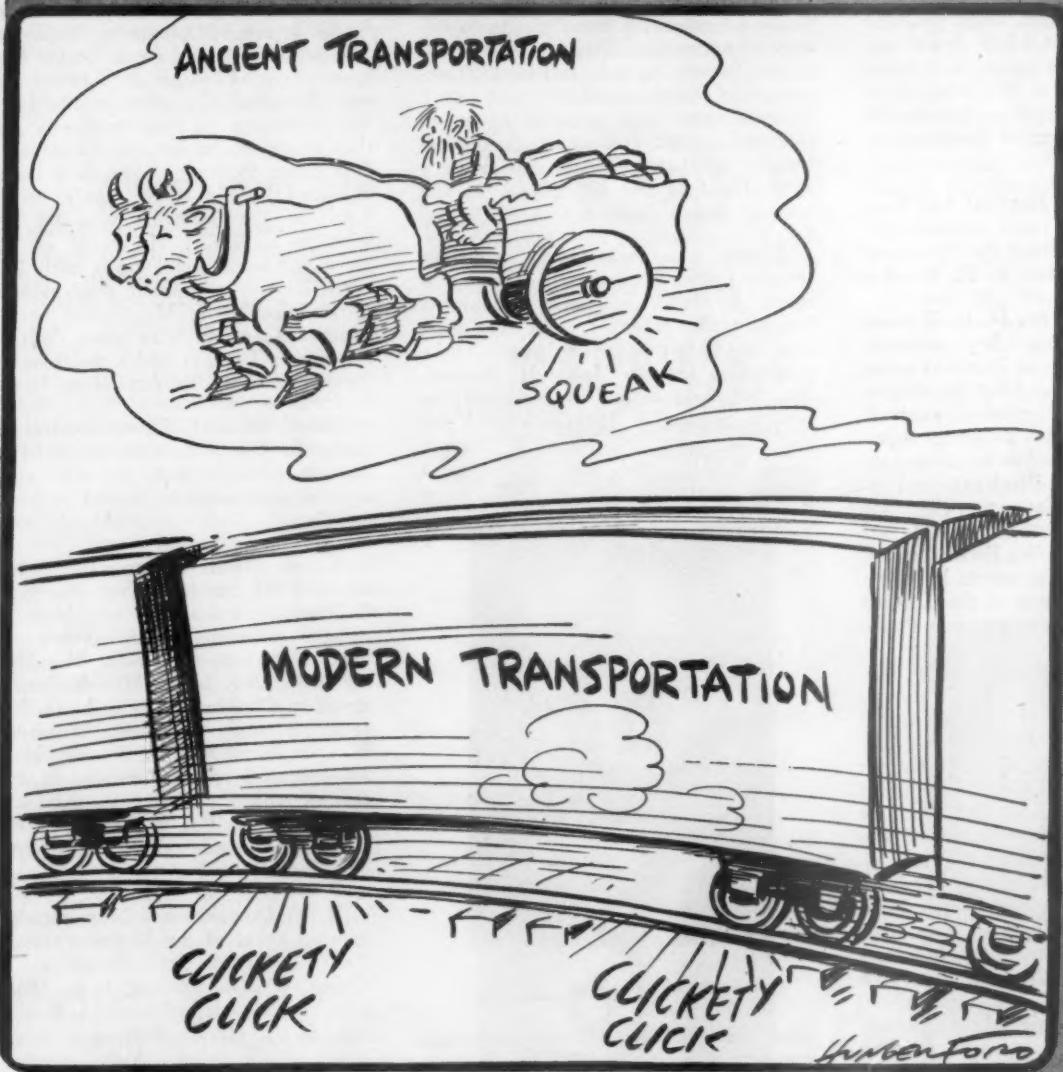


**Kenneth F. Stone**

because of illness. Mr. Stone was born at Chippewa Falls, Wis., in 1904, and is a graduate of Lawrence College and the University of Michigan Law School. He joined the N.Y.C. in 1931 as an attorney at Detroit, Mich., and was transferred to general headquarters at New York in 1947. He was appointed assistant general solicitor in 1948, assistant general counsel in 1949 and general attorney in January 1951. He had been serving as acting general

The Wheel—Man's Greatest Invention

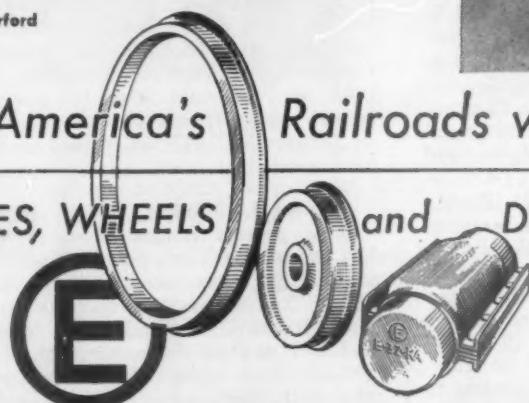
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counsel and general attorney since January 10.

**J. F. Prendergast**, assistant to the general freight claim agent of the CANADIAN NATIONAL, has been appointed freight claim agent, with headquarters as before at Montreal, Que. **M. R. Reid** succeeds Mr. Prendergast as assistant to the general freight claim agent.

**Miss M. Claire Barrett** has been appointed secretary and treasurer of the MISSISSIPPI CENTRAL, at Scranton, Pa., succeeding the late **R. E. Weeks**.

**R. N. Clattenburg**, **D. L. Wilson** and **Carl Helmetag, Jr.**, assistant general solicitors of the PENNSYLVANIA at Philadelphia, Pa., have been promoted to assistant general counsel. **William C. Antoine**, assistant solicitor, has been promoted to assistant general solicitor. **L. A. Ehrhart**, real estate agent for the Eastern region, has been appointed assistant general real estate agent, and **J. W. Ewalt**, assistant general real estate agent, has been named real estate agent of the Eastern region. All have headquarters at Philadelphia.

Mr. Clattenburg was born at Wilmington, Del., on July 1, 1915, and attended Overbrook (Pa.) Episcopal Academy, Harvard University (A.B. 1935), and University of Pennsylvania Law School (LL.B. 1938). He entered railroad service in June 1939 as law clerk in the legal department of the P.R.R. and in July 1940 became assistant solicitor. He was appointed assistant general solicitor in March 1945.

Mr. Wilson was born at Gap, Pa., on March 14, 1913, and attended Harrisburg (Pa.) Academy, Haverford College (A.B. 1933) and the University of Pennsylvania Law School (LL.B. 1940). He entered railroad service in 1941 as law clerk in the legal department of the P.R.R. and in 1942 was appointed assistant solicitor, becoming assistant general solicitor in 1945.

Mr. Helmetag was born at Chestnut Hill, Pa., on December 2, 1914, and attended Germantown Academy and University of Pennsylvania (B.S. in Economics 1936; LL.B. 1939). During 1939 he was attorney with Stradley, Ronon & Stevens, joining the P.R.R. in 1940 as solicitor. After service in World War II from 1940 to December 1945, Mr. Helmetag returned to the P.R.R., and on January 1, 1947, was appointed assistant general solicitor. From 1947 to 1949 he was advisor to the Joint State Government Commission of Pennsylvania in connection with revision of the state's Penal Code and Code of Criminal Procedure.

## TRAFFIC

**C. R. Hartshorn**, whose promotion to assistant western traffic manager of the DELAWARE, LACKAWANNA & WESTERN at Chicago, was reported in the March 5 *Railway Age*, started

service with that road in August 1913 as chief clerk of the commercial agency at Toledo, Ohio. In September 1917 Mr. Hartshorn left the Lackawanna to enter the Army, rising to the rank of major. In 1920 he was assigned to the Detroit agency, and in 1927 returned to Toledo as commercial agent. He was appointed general agent in December 1942 and assistant general freight agent at Chicago in January 1943. He held the latter post at the time of his promotion.

**Elmer A. Schofield**, assistant freight traffic manager of the BALTIMORE & OHIO, has been appointed freight traffic manager, with headquarters as before at Cincinnati, Ohio, succeeding the late **John H. Hague**. Mr. Schofield began his railroad career in September 1910 as a clerk for the Cincinnati, Hamilton & Dayton (now B&O) and was appointed a freight representative in 1920, assis-



Elmer A. Schofield

tant commercial agent in 1930 and commercial agent in 1932. On January 1, 1937, he became assistant general freight agent of the B&O. at Cincinnati and was promoted to general freight agent there on September 1, 1943. Mr. Schofield became assistant freight traffic manager at Cincinnati on January 30, 1947, which position he held until his recent appointment.

**Daniel L. Norton**, whose promotion to general freight agent of the DELAWARE, LACKAWANNA & WESTERN at Chicago, was announced in the March 5 *Railway Age*, was born on April 16, 1897, at Whitinsville, Mass., and was graduated from Northbridge (Mass.) high school. Mr. Norton's career with the Lackawanna began in May 1922, when he was employed as a clerk. He was appointed general agent in May 1942 at Albany, N. Y., and in January of the next year became general agent at Toledo, Ohio. He was transferred in the same capacity to Boston, Mass., in October 1944, at which point he was serving at the time of his promotion.

**William Lawrence Burke**, who has been promoted to general freight

agent of the CHICAGO & EASTERN ILLINOIS at Chicago, as announced in the March 12 *Railway Age*, was born at St. Louis, Mo., April 13, 1893. Mr. Burke began his career in April 1908 as a messenger-yard clerk for the Rock Island-Frisco-Chicago & Eastern Illinois Terminal Company at St. Louis. After holding various positions with that company, he became employed in September 1920 as a rate clerk on the Missouri Pacific at St. Louis, and in April of the following year he went with the C. & E. I. He served as chief clerk and commercial agent until 1927, when he was appointed general agent at Buffalo, N. Y. Mr. Burke became general agent at Milwaukee, Wis., in September 1943, at which point he was located prior to his promotion.

**John Daniel Voss**, commercial agent of the ATLANTIC COAST LINE, has been appointed general agent, with headquarters as before at Augusta, Ga.

**V. H. Biedermann**, traffic manager of the ST. LOUIS-SAN FRANCISCO at Birmingham, Ala., has been appointed director of development, with headquarters at St. Louis, Mo. He is succeeded by **John Marsh**, general agent at Cleveland, Ohio. **A. D. Masters**, general agent at Milwaukee, Wis., replaces Mr. Marsh. Mr. Marsh, who entered railroad service in 1917, started with the Frisco as chief clerk at Pittsburgh, Pa., in 1934, and since 1942 has served as general agent at Cleveland.

**R. F. Donnett** has been appointed general agent of the MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE at Eau Claire, Wis., succeeding **J. G. Quick**, who has been transferred to Washington, D. C. **D. C. C. Simpson**, general agent at Winnipeg, Man., moves to Philadelphia, Pa., to succeed **J. S. McGogy**, who has become assistant general freight agent at Chicago, replacing **C. O. Norwick**, transferred to Neenah-Menasha, Wis. **George B. Shimek** and **A. V. Spanbauer** have been appointed general agents at Minneapolis, Minn., and Menasha, Wis., respectively. **F. R. Crow** succeeds Mr. Simpson at Winnipeg. **Harry H. Thomas**, general flour, grain and coal agent at Minneapolis, has retired. His duties have been assumed by **E. J. Murphy**, assistant general freight agent at Minneapolis.

**George E. Benz**, who has been appointed general north western freight agent of the CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC, with headquarters at Minneapolis, Minn., as announced in the March 12 *Railway Age*, was born on March 16, 1898, at Winona, Minn., where he attended high school. Starting his railroad career with the Milwaukee in his home town in February 1916, Mr. Benz held various positions in the local freight office until 1920, when he was transferred to Eau Claire, Wis., as chief clerk in the

local freight office. He was appointed city freight agent at Minneapolis in 1926 and traveling freight agent in 1938, becoming division freight and passenger agent at Aberdeen, S. D., in June 1943. In November 1945 he returned to Minneapolis as general agent, the post he held until his new appointment.

**L. C. Wheeler**, general agent, freight department, of the NEW YORK CENTRAL SYSTEM at Windsor, Ont., has been transferred in that capacity to Detroit, Mich. He is succeeded by **C. P. Gregory**, traveling freight agent at Toronto, Ont.

**Carl H. Groninger**, general freight agent (sales and service) of the BALTIMORE & OHIO, has been promoted to assistant freight traffic manager, with headquarters as before at Chicago. Mr. Groninger was born on June 16, 1901, at Chillicothe, Ohio, where he received his high school education. He first entered the service of the B&O. in December 1918 in his native city as a clerk in the roundhouse. After holding various clerical positions at Chillicothe, Cleveland, and Akron, he was appointed traveling freight agent in 1923. In 1928 he was made district freight agent at Huntington, W. Va., and in 1934 became division freight agent at Parkersburg, W. Va., later serving in that capacity successively at Rochester, N. Y., and Baltimore, Md. Mr. Groninger was appointed assistant general freight agent at Chicago in January 1945, and subsequently was advanced to general freight agent at that point.

**Charles R. Murray**, assistant freight traffic manager—rates, tariffs and divisions of the CANADIAN NATIONAL SYSTEM, has been appointed freight traffic manager to head the rate division of the Canadian lines of the road, with headquarters as before at Montreal, Que. **Herbert B. Parr**, assistant to vice-president—traffic of the system, has been appointed assistant freight traffic manager—rates, with headquarters as before at Montreal. **George M. Douglas**, assistant general freight agent—rates, tariffs and divisions of the system, has been appointed general freight agent. **C. L. McCoy**, general freight agent—rates, tariffs and divisions of the system at Montreal, has been appointed traffic manager of the Atlantic region at Moncton, N. B., succeeding **E. A. Rydell**, who has been appointed freight traffic manager of the Central region at Toronto, Ont., replacing **Gordon E. Smith**, whose appointment as general freight traffic manager—sales at Montreal was reported in the *Railway Age* of March 19. **Robert J. McDougall**, district freight agent at Hamilton, Ont., has been appointed assistant general freight agent—rates of the Central region at Toronto, Ont., succeeding **Robert Pirrie**, who has been appointed assistant general freight

agent of the Canadian lines of the road. **Charles H. Garneys** has been appointed chief of the tariff bureau of the Central and Atlantic regions at Montreal, succeeding **Walter A. Bell**, who has been appointed assistant general freight agent of the Canadian lines. **Earl G. Johnston** has been appointed division freight agent at Hamilton, Ont. **Joseph V. Rice** has been named assistant general freight agent—rates of the Western region at Winnipeg, Man. **David J. Scott**, district freight agent, has been appointed division freight agent, with headquarters as before at Port Arthur, Ont.

#### MECHANICAL

As reported in the *Railway Age* of February 5, **Henry E. Whitener** has been appointed superintendent motive power and rolling equipment of the JERSEY CENTRAL LINES at Elizabethport, N. J. Mr. Whitener was born on September 5, 1895, at Hickory N. C., where he attended high school and Lenoir College. He entered railroad service on October 1, 1913, with the Carolina & Northwestern at Hickory as apprentice. During 1916 and 1917 he



Henry E. Whitener

was with the Southern as machinist at Spencer, N. C., subsequently serving in the United States Army Air Corps. In 1919 he joined the Baltimore & Ohio as foreman at Fairmont, W. Va., becoming general foreman at Parkersburg, W. Va., in 1920 and assistant master mechanic at Holloway, Ohio, in 1922, and transferring to Cumberland, Md., in 1926. From 1927 to 1930 Mr. Whitener was shop superintendent for the Chicago Great Western at Oelwein, Iowa, and from 1930 to 1937 was foreman for the Central of New Jersey at Jersey City, N. J. In 1937 he became general locomotive inspector of the Reading at Reading, Pa., and in 1939 was appointed shop superintendent of the C.N.J. at Elizabeth, N. J., becoming master mechanic at Jersey City in 1942. Mr. Whitener held the latter position until his recent appointment.

#### ENGINEERING AND SIGNALING

**R. H. Carpenter**, division engineer of the MISSOURI PACIFIC LINES at Poplar Bluff, Mo., has been appointed engineer of design, with headquarters at St. Louis. He succeeds **W. H. Giles**, who has been promoted to assistant chief engineer, system-construction, as announced in the March 19 *Railway Age*.

#### OBITUARY

**John H. Hague**, freight traffic manager of the BALTIMORE & OHIO at Cincinnati, Ohio, died recently. Mr. Hague was born at Larimer, N. D., in 1897 and attended Bishop's College, Lennoxville, Que., and Purdue University. He served with the United States Naval Aviation Corps from 1917 to March 1919, entering railroad service in the latter month with the Boston & Maine at Boston, Mass. In March 1920 he became freight solicitor of the Central of Georgia at Boston. In Oc-



John H. Hague

tober 1923 he joined the B&O. as traveling freight agent at Boston, later serving successively as freight representative at New York; district freight representative at San Francisco, Cal., and Cincinnati; assistant general freight agent at Washington D. C., and general freight agent at Washington and St. Louis, Mo. Mr. Hague was appointed freight traffic manager at Baltimore, Md., in June 1946, transferring to Cincinnati in February 1947.

**H. C. Wiltse**, special representative—office of vice-president, PENNSYLVANIA, Pittsburgh, Pa., and chairman of the Ohio Railroad Association, died in St. Anthony Hospital, Columbus, Ohio, on March 9, following a brief illness.

**George Williams**, former traffic counsel of the DENVER & RIO GRANDE WESTERN at Denver, Colo., who retired in January 1949 after 56 years of railroad service, died in that city on March 11, at the age of 78.

## OPERATING REVENUES AND OPERATING EXPENSES OF CLASS I STEAM RAILWAYS

Compiled from 127 monthly reports of revenues and expenses representing 131 Class I steam railways

*(Switching and Terminal Companies Not Included)*

FOR THE MONTH OF DECEMBER 1950 AND 1949

Item	United States		Eastern District		Southern District		Western District	
	1950	1949	1950	1949	1950	1949	1950	1949
Miles of road operated at close of month	226,067	226,536	53,306	53,384	45,950	45,998	126,811	127,154
Revenues:								
Freight	\$673,554,491	\$575,656,413	\$241,860,747	\$215,122,222	\$142,414,922	\$119,749,165	\$289,278,822	\$240,785,026
Passenger	79,271,125	74,378,975	41,870,623	40,410,678	11,958,975	11,311,622	25,441,527	22,656,675
Mail	131,008,350	23,348,327	55,746,412	8,176,890	24,579,409	4,102,328	50,682,529	11,069,109
Express	9,188,032	9,061,962	2,794,245	2,479,534	1,829,681	1,860,823	4,564,106	4,721,605
All other operating revenues	34,908,234	28,376,740	15,317,748	12,615,175	6,034,245	5,192,436	13,556,241	10,569,129
Railway operating revenues	927,930,232	710,822,417	357,589,775	278,804,499	186,817,232	142,216,374	383,523,225	289,801,544
Expenses:								
Maintenance of way and structures	104,550,306	93,144,428	42,678,856	30,765,412	19,527,531	19,010,715	42,343,919	43,368,301
Depreciation	11,696,575	11,075,254	4,930,750	4,766,876	2,243,325	2,003,661	4,522,500	4,304,717
Retirements	5,653,167	5,232,637	3,026,106	2,270,732	1,471,166	1,147,508	1,155,895	1,814,397
Deferred maintenance	1,262,696	240,892	1,500,000	400,000	*184,466	*97,542	*52,836	*61,566
Amortization of defense projects	301,045	164,700	14,796	31,525	41,596	46,362	244,653	86,813
Equalization	*66,052	*21,013	3,007,806	460,828	*3,180,487	*777,046	106,629	295,205
All other	85,702,875	76,451,958	30,199,398	22,335,451	19,136,399	16,687,772	36,367,078	36,928,735
Maintenance of equipment	163,417,607	137,607,739	77,841,708	57,429,031	27,544,657	24,284,913	58,031,242	55,893,795
Depreciation	25,268,782	23,608,317	9,208,727	8,419,186	5,812,236	5,342,727	10,247,819	9,846,404
Retirements	*721,768	*6,814	*18,378	*31,842	*689,008	*30,332	*14,382	55,360
Deferred maintenance and major repairs	14,343,282	8,055,950	14,455,506	8,320,703	*13,708	*7,228	*98,516	*257,525
Amortization of defense projects	2,496,518	1,300,819	336,462	528,966	319,919	238,572	1,840,137	533,281
Equalization	*1,628,313	*2,126,919	*1,115,909	*1,564,692	*620,777	*584,166	108,373	21,939
All other	123,659,106	106,776,386	54,975,300	41,756,710	22,735,995	19,325,340	45,947,811	45,694,336
Traffic	16,779,465	16,127,976	5,603,770	5,622,080	3,604,017	3,354,798	7,571,678	7,251,098
Transportation—Rail line	327,226,973	289,039,452	140,292,977	122,467,645	57,772,874	52,389,830	129,161,122	114,181,977
Miscellaneous operations	9,894,239	9,628,930	3,706,560	3,670,377	1,562,675	1,423,502	4,625,004	4,535,051
General	23,552,933	22,921,993	9,283,630	8,468,594	4,899,665	4,861,848	9,369,638	9,591,461
Railway operating expenses	645,421,523	568,470,428	279,407,501	228,323,139	114,911,419	105,325,606	251,102,603	234,821,683
Net revenue from railway operations	282,508,709	142,351,989	78,182,274	50,481,360	71,905,813	36,890,768	132,420,622	54,979,861
Railway tax accruals	154,803,205	57,868,309	45,290,054	20,811,958	39,321,824	19,883,708	70,191,327	17,172,643
Pay-roll taxes	22,948,820	20,769,694	9,601,778	8,091,011	4,271,335	3,956,955	9,075,707	8,721,688
Federal income taxes†	104,415,313	13,009,131	25,450,675	4,591,611	28,777,768	10,372,892	50,166,869	*1,955,372
All other taxes	27,439,073	24,089,484	10,237,601	8,129,336	6,252,721	5,553,821	10,948,751	10,406,327
Railway operating income	127,705,504	84,483,680	32,892,220	29,669,402	32,583,989	17,007,060	62,229,295	37,807,218
Equipment rents—Dr. balance	11,112,207	12,925,735	5,622,697	7,569,647	*1,282,398	*743,624	6,771,908	6,099,712
Joint facility rent—Dr. balance	3,274,315	2,787,635	1,553,663	1,379,490	418,974	434,035	1,301,678	974,110
Net railway operating income	113,318,982	68,770,310	25,715,860	20,720,265	33,447,413	17,316,649	54,155,709	30,733,396
Ratio of expenses to revenues (percent)	69.6	80.0	78.1	81.9	61.5	74.1	65.5	81.0

FOR THE TWELVE MONTHS ENDED WITH DECEMBER 1950 AND 1949

Item	United States		Eastern District		Southern District		Western District	
	1950	1949	1950	1949	1950	1949	1950	1949
Miles of road operated at close of month	226,402	226,619	53,349	53,419	46,085	46,020	126,968	127,150
Revenues:								
Freight	\$7,817,380,801	\$7,048,396,253	\$2,874,912,901	\$2,601,502,233	\$1,597,858,168	\$1,412,781,681	\$3,344,609,732	\$3,034,562,339
Passenger	813,417,330	860,743,643	430,203,894	453,450,978	121,030,015	132,187,679	262,183,421	275,104,986
Mail	374,046,203	222,774,291	135,897,450	81,280,840	65,503,194	40,146,432	172,645,559	101,347,019
Express	81,464,546	79,531,060	26,277,645	21,412,914	14,199,968	14,134,886	40,986,933	43,983,260
All other operating revenues	386,901,908	368,868,943	172,090,607	163,175,797	63,399,099	60,392,136	151,412,202	145,391,010
Railway operating revenues	9,473,210,788	8,580,314,190	3,639,382,497	3,320,372,762	1,861,990,444	1,659,642,814	3,971,837,847	3,600,298,614
Expenses:								
Maintenance of way and structures	1,287,263,934	1,283,584,621	467,099,962	447,777,777	266,597,510	263,664,798	553,566,462	572,142,046
Depreciation	132,168,753	127,800,261	55,753,862	53,804,036	23,876,564	22,332,467	52,538,327	51,663,758
Retirements	20,823,855	18,009,979	8,956,820	5,212,424	4,138,363	3,111,275	7,228,672	9,686,280
Deferred maintenance	*540,291	*3,246,039	495,841	367,774	*472,385	*1,749,272	*563,747	*1,864,541
Amortization of defense projects	1,916,991	1,814,905	198,800	201,753	530,437	560,006	1,187,754	37,999
Equalization		37,999						
All other	1,132,894,626	1,139,167,516	401,694,639	388,191,790	238,524,531	239,410,322	492,675,456	511,565,404
Maintenance of equipment	1,707,933,916	1,607,335,151	730,042,740	654,557,087	325,811,117	315,985,079	652,080,059	636,792,985
Depreciation	297,501,231	280,014,897	110,441,572	107,509,922	66,640,880	62,641,475	120,418,779	109,863,500
Retirements	*1,405,144	*663,299	*136,746	*173,713	*896,186	*218,005	*372,212	*271,581
Deferred maintenance and major repairs	4,708,748	7,009,005	5,635,898	7,971,125	*146,115	*233,674	*781,035	*728,446
Amortization of defense projects	15,624,072	14,699,189	5,184,647	5,452,497	2,879,170	2,864,312	7,560,255	6,382,380
Equalization		1				1		
All other	1,391,505,009	1,306,275,358	608,917,369	533,797,256	257,333,368	250,930,970	525,254,272	521,547,132
Traffic	191,556,406	194,355,015	64,733,619	66,208,100	40,191,004	40,743,319	86,631,783	87,403,596
Transportation—Rail line	3,491,071,721	3,415,871,778	1,482,617,067	1,438,008,290	626,537,359	619,747,275	1,381,917,295	1,358,116,213
Miscellaneous operations	110,309,747	117,991,686	39,183,324	43,717,307	16,428,599	17,182,700	54,697,824	57,091,679
General	271,137,461	272,762,382	105,873,809	104,002,905	57,614,980	58,279,973	107,648,672	109,679,504
Railway operating expenses	7,059,273,185	6,891,900,633	2,889,550,521	2,755,071,466	1,333,180,569	1,315,603,144	2,836,542,095	2,821,226,023
Net revenue from railway operations	2,413,937,603	1,688,413,557	749,831,976	565,301,296	528,809,875	344,039,670	1,135,295,752	779,072,591
Railway tax accruals	1,194,625,883	832,406,968	360,558,517	276,643,280	283,130,631	185,716,995	550,936,735	370,046,693
Pay-roll taxes	262,436,777	253,152,608	108,238,632	102,756,703	49,371,260	48,191,400	104,826,885	102,204,505
Federal income taxes†	601,193,256	261,420,911	134,084,878	60,188,046	162,026,251	69,420,306	305,082,127	131,812,559
All other taxes	330,995,850	317,833,449	118,235,007	113,698,531	71,733,120	68,105,289	141,027,723	136,029,629
Railway operating income	1,219,311,720	856,006,589	389,273,459	288,658,016	245,679,244	158,322,675	584,359,017	409,025,898
Equipment rents—Dr. balance	140,3							

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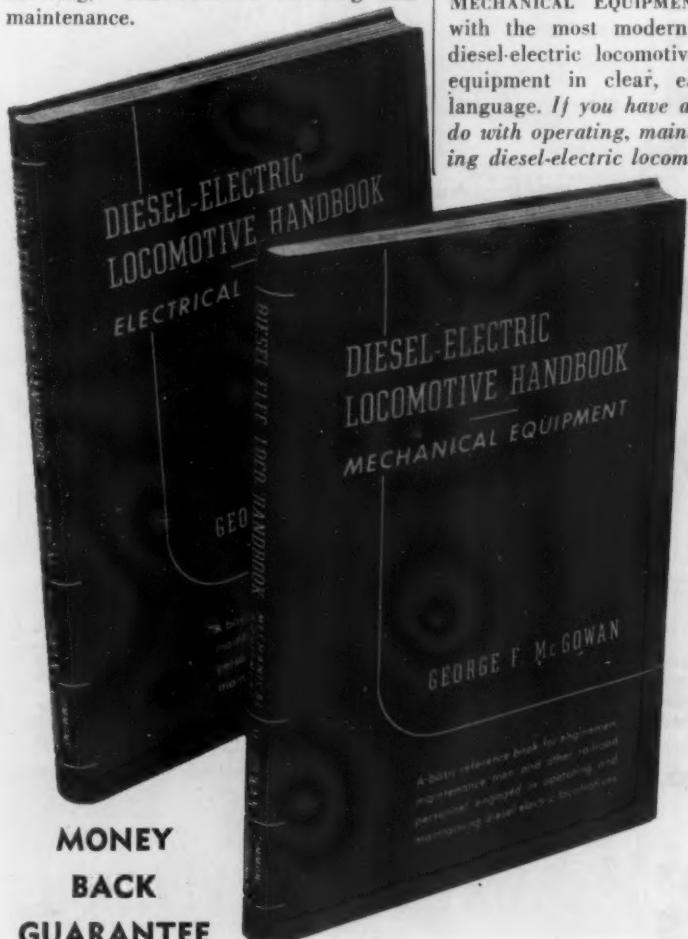
By GEORGE F. McGOWAN, Technical Consultant

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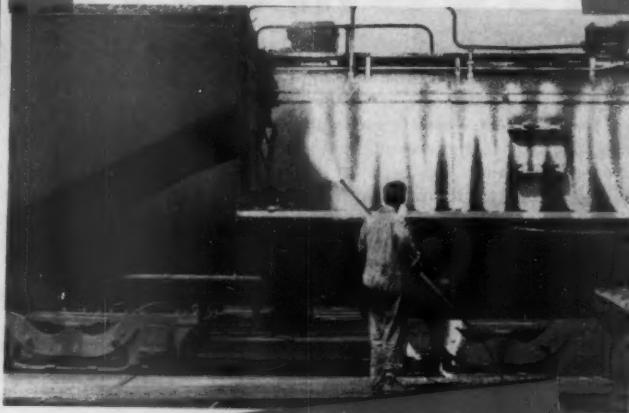
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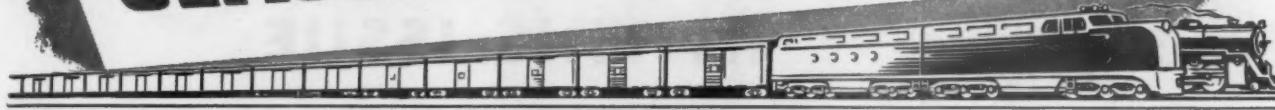
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# Advertisers

## IN THIS ISSUE

<b>A</b>	General Steel Castings .....	55	Railway Age .....	68	
American Brake Shoe Company ..	24, 25	Glidden Company, The .....	14	Railway Educational Bureau, The ..	81
American Steel Foundries .....	13	<b>H</b>		Remington Rand, Inc. .....	16
Association of Manufacturers of Chilled Car Wheels .....	19	Hunt Company, Robert W. ....	81	Rust-Oleum Corporation .....	17
<b>B</b>	Hyatt Bearings Division, General Motors Corporation ..	4	Ryerson & Son, Inc., Joseph T. ....	82	
Bakelite Company, Division of Union Carbide and Carbon Corporation ..	11	<b>I</b>		<b>S</b>	
Baldwin-Lima-Hamilton Corporation ..	8, 9	Inland Steel Company .....	3	Scullin Steel Co. .....	27
Baxter & Co., J. H. ....	80	Iron & Steel Products, Inc. ....	81	Simmons-Boardman Publishing Company .....	71, 79
Bethlehem Steel Company .....	10	<b>L</b>		Standard Railway Equipment Manufacturing Company .....	22
Bituminous Coal Institute .....	12	Lewis Bolt & Nut Co. ....	80	Symington-Gould Corporation, The ..	83
<b>C</b>	<b>M</b>	<b>T</b>			
C-O-Two Fire Equipment Company ..	74	Magnus Metal Corporation, Subsidiary of National Lead Company .....	28	Texas Company, The .....	2
Classified Department .....	81	Mississippi Valley Equipment Co. ..	81	Timken Roller Bearing Company, The Back Cover	
<b>D</b>	<b>O</b>	<b>U</b>			
Dalton Supply Co. ....	81	Oakite Products, Inc. ....	80	Union Carbide and Carbon Corporation, Bakelite Company ..	11
Dyer Co., Inc., W. H. ....	81	Okonite Company, The .....	71	Union Switch & Signal Company ..	6
<b>E</b>	<b>P</b>	<b>V</b>			
Edgewater Steel Company .....	75	Pressed Steel Car Company, Inc. ..	57	Vanadium Corporation of America ..	18
Edison Storage Battery Division of Thomas A. Edison Incorporated ..	23	Pullman-Standard Car Manufacturing Company .....	20, 21	<b>W</b>	
<b>F</b>	Purdy Company, The .....	71	Westinghouse Air Brake Co. ....	60, 61	
Fairbanks, Morse & Company ..	63 to 66 incl.	<b>R</b>	Westinghouse Electric Corporation ..	8, 9, 26	
<b>G</b>	Railroad Supply and Equipment Inc. ....	73	Wine Railway Appliance Co., The Front Cover		
General Electric Company .....	15				

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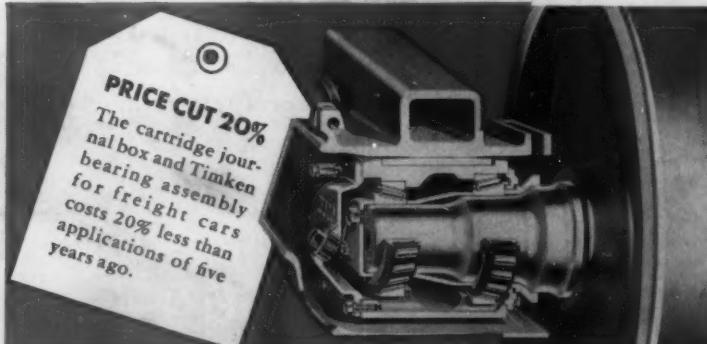
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